

ATARI COMPUTER ENTHUSIASTS [N.S.W.]

A.C.E. (N.S.W.)
G.P.O. BOX 4514,
SYDNEY. 2001.
N.S.W. AUSTRALIA.

INSIDE INFO

NO.32 NO.33

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UFO'S

IV

TURED

TAKE
ME TO
YOUR
LARDER

ARC
FILES

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,ACC
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Here is one of the few obtainable
photos of the alien. Distortion was
caused by super-long telephoto lens.

NO FRILLS

PRICE \$3.00

SOFTWARE EXCHANGE

ADVERTISING RATES ARE
\$50 PER PAGE, \$30 PER HALF PAGE
\$20 PER QUARTER PAGE

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Ordering software, 8 bit or ST

There are FOUR methods available.

1. At the meeting, pre-prepared software is available for sale, as per the directory listings printed in this edition.

2. Authors of articles for inside info, are given pre-prepared software of their choice providing the article is accepted and of use to other members. Similarly, winners of competitions run by ACENSW are supplied pre-prepared software using the order form on the back page

3. For mail orders and/or orders for non-current software, (orders are taken at the meeting too for collecting at the next meeting) the order form must be filled in and delivered to the software exchange officer with suitable payment included.

3.1 Pay for your order and postage (if applicable \$2.00) and your order will be compiled within two working days and either mailed or placed in an envelope to be collected at the meeting.

3.2 Telephone orders will only be accepted for software to be picked up at the following meeting. One week's notice must be given.

4. Special compilations. If you want a special collection be made to your exacting requirements, an assortment, on one or more disks, the cost will be \$0.50 per program plus the cost of media. Minimum charge is \$15 plus postage. Special compilations take time, so a two week lead time is needed to prepare a master disk.

Cheques or Money order should be made out to ACE(NSW), and mailed with the order form to

ACE(NSW)
Att:Software exchange
PO BOX 4514
GPO SYDNEY 2001 NSW

REMEMBER to include the cost of postage in the total price. And use the order form.

Despatch of software by mail:-
All mail orders filled will be posted within two weeks of receiving an order.
All software mailed will be certified for reasons of proof of postage.

If in doubt, or if you wish to make an enquiry, please phone Jeff Madock (02)-568-2990 between 4pm and 9pm Monday to Sunday

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This is the latest list of ST public domain programs available from the software exchange.

PICTURE DISKS

Disks 1 to 17 are all Slide show picture disks.

Here is a short list of them.
Disk 1 : ATARI COMPUTER PICTURES
Disk 2 : CARTOON PICTURES Vol 1
Disk 3 : CARTOON PICTURES Vol 2
Disk 4 : SPACE/SCI-FI PICTURES Vol 1
Disk 5 : SPACE/SCI-FI PICTURES Vol 2
Disk 6 : SPACE/SCI-FI PICTURES Vol 3
Disk 7 : DIGITISED PICTURES Vol 1
Disk 8 : DIGITISED PICTURES Vol 2
Disk 9 : DIGITIZED PICTURES Vol 3
Disk 10: GENERAL PICTURES VOL 1
Disk 11: GENERAL PICTURES Vol 2
Disk 12: GENERAL PICTURES Vol 3
Disk 13: GENERAL PICTURES Vol 4
Disk 14: GENERAL PICTURES Vol 5

WARNING WARNING WARNING

Picture Disks 15 to 17 may cause offence. Buy them at your own risk.
 Disk 15: NUDES NUDES NUDES Vol 1
 Disk 16: NUDES NUDES NUDES Vol 2
 Disk 17: NUDES NUDES NUDES Vol 3

PENTAGON.CAD Disk 19
 CAD-3D demonstration of revolving pentagon. (Colour only)
 ANIMATOR.PRG CAD_DEMO.TXT
 PENTAGON.DLT PENTAGON.PI1
 README .DOC

MOUNTAIN.CAD Disk 20
 CAD-3D Demonstration of revolving Mountain/Coast. (Colour only)
 ANIMATOR.PRG HELP .TXT
 MOUNT BAT MOUNT DLT
 MOUNT .PI1

GLOBE.DEM Disk 21
 Revolving globe of the Earth
 Demonstration and others. (Colour only)
 Needs imeg or 1040 ST to work.
 Takes 4.5 minutes to load.
 GLOBE 1 GLOBE 2
 GLOBE PRG READ_ME DOC
 RICH2 PRG SPHERE .PRG
 STPATERN.PRG SUPBOX PRG
 WAACE 066

PUZZLE.MON Disk 22
 PUZZLE PUZZLE a sort of Jigsaw maze.
 (Mono only)
 PUZMUSIC.X32 PUZZLE PQX
 PUZZLE PRG PUZZLE RAS
 PUZZLE .PIX SCREEN .PIX
 PUZZLES PIX DISKTOP INF
 ST WRITER Disk 23
 ST WRITER Ver 1.5 comes with Printer
 Config files. (Colour/Mono)
 Includes full Documentation on the disk.

ST GAMES 1 Disk 24
 St Games Disk 1 (Colour only)
 BIDRYTH .BAS BOMBER .BAS
 SCRATCH .BAS SWITCHBX.BAS
 CELESTE .DOC CELESTE .PRG
 SUNDOG HNT RIPCORD .DAT
 RIPCORD .PRG SCORE4 .DOC
 SCORE4 .PRG BATTSHIP.TOS
 DISKTOP .INF MAZEMAKR.TOS
 READ .ME BLAKJACK.PRG
 MADLIB .PRG MYLIFE .PRG
 TWOGAME PRG

DOLL.DEM Disk 25
 Great spinning digitised Dolls animation demonstration with speedup/slowdown.
 Takes 4.5 minutes to load.
 Requires imeg or 1040ST (Colour only)
 DOLLS .1 DOLLS .2
 DOLLS .PRG READ_ME .DOC

MIDI 7 & 8 Disk 26
 4 MIDI folders containing 160 Casio patches.
 CZSOUNDS.001 CZSOUNDS.002
 CZSOUNDS.003 - CZSOUNDS.004
 CASIO .DOC CASIO .PRG
 TYPHOON MIDI .008

UTILITIES.1 Disk 27
 Many useful programming utilities and accessories. (Colour/Mono)
 ANACLOCK.ACC BREAKOUT.ACC
 CALC .ACC CALCACC .DES
 RAM .ACC RAMACC .DOC
 DIGCLOCK.ACC BICALC2 .ACC
 DESKCALC.ACC PUZZLE .ACC
 DBLBOOT .PRG NOVERIFY.PRG
 COPYDISK.PRG FORMAT .TTP
 SECTEDIT.PRG SQUEEZE .PRG
 FORMAT .DOC SECTEDIT.DOC
 SQUEEZE .DOC UNSQUEEZ.PRG
 DEGCOL .PRG NEOCON .TTP

SLIDE .PRG SMAKER .TOS
 EFFETS .PRG OMAKER .DOC
 SMAKER .DOC WIND .RSC
 NEOCON .C OMAKER S
 DUMP .DOC DUMP .TOS
 PRINT C PRINT PRG
 PRINTDIR.RSC DUMP .S
 LABELS .BAS PRINT .DOC
 PRINTDIR.PRG SPOOL .ACC
 COMMAND .PRG MUSHRO .S
 MUSHRO .TOS STDIO .H
 TITLE BAS CALC PRG
 DIRECTRY.DOC DISKTOP .INF
 README .DOC TIMEDA .PRG

MIDITRACK.DEM Disk 28
 Demo of METATRAK. Includes music files.
 ADDDEMO BUMBLB00
 DESKTOP .INF METATRAK.RSC
 README BARTOK
 CHERNUBI DISKTOP .INF
 MOZART SNOWFLAK
 BUMBLBEE DEBUSSY
 METATRAK.PRG NEWYORK

BOFFIN.DEM Disk 29
 Boffin wordprocessor demonstration disk. Includes fonts and Printer Config files.
 ADMOLE .FNT COMPUTER.FNT
 NORMAL .FNT THIN .FNT
 DESKTOP .INF BUFFDMP .WPG
 FIAT .WPG HIRES .WPG
 JACK .WPG NOW .WPG
 ATARI .PRN CP80 .PRN
 FX80 .PRN MX80 .PRN
 STARNL10.PRN CANON .PRN
 EPSON .PRN LX80 .PRN
 RX80 .PRN MANUAL .DOC

UTILITIES 2 Disk 30
 Many useful programming utilities and accessories. (Colour/Mono)

ANALYZER.ASC ANALYZER.TOS
 BANNER .DAT BANNER 2.DOC
 BANNER2 .PRG MARQUE .FNT
 MARQUE .PRG CLIP .C
 CLIP .PRG SHOWCLIP.ACC
 CLIP .H CLIPDOC .TXT
 SHOWCLIP.C BLAST .PRG
 MACTOA .PRG PICDEX .TOS
 LG000 .PRT PRTINST .PRG
 PRTINST .S README
 CMOVIES .FRM MDISPLAY.CMD
 MOVIES .DAT NMOVIES .FRM
 SHMOVIES .FRM HDBAUTO .CMD
 MEDIT .CMD MSHEET .BAS
 README .DOC TMOVIES .FRM
 DISKTOP .INF PCOMMAND.TXT
 PEDIT .TTP READ .ME
 PCOMMAND.PRG PEDIT .DOC
 PREVIEW .PRG

UTILITIES 3 Disk 31
 Many useful programming utilities and accessories. (Colour/Mono)
 25LS2521.EZD 74LS04 .EZD
 74LS164 .EZD 74LS27 .EZD
 74LS86 .EZD 41256 EZD
 74LS08 .EZD 74LS165 .EZD
 74LS30 .EZD ALPHA EZD
 6264SRAM.EZD 74LS10 .EZD
 74LS20 .EZD 74LS32 .EZD
 SYMBOLS .EZD 7407 .EZD
 74LS11 EZD 74LS21 EZD
 74LS373 .EZD WD9216 .EZD
 74LS00 EZD 74LS138 EZD
 74LS244 .EZD 74LS374 .EZD
 74LS02 .EZD 74LS161 .EZD
 74LS25 EZD 74LS74 EZD
 FONTCONV PRG FONTCONV.TXT
 FORMAT .RSC FORMATBW.RSC
 FORMATER.PRG FORMAT2 PRG
 FORMAT2H.RSC FORMAT2M.RSC
 DISKTOP .INF READ ME

DEMOS.1 Disk 32

Various demos.
 MANDLBOX.DOC MANDLBOX PRG
 MANDLBOX.RSC DISKS .PRG
 JULIA3 .PRG KLEIDO .PRG
 ARABES .MUS ENTER .MUS
 MINUET .MUS PLAY .INT
 PLAY .RSC BAGA .MUS
 MING .MUS MOZMIN .MUS
 PLAY .PRG CCDGT0 .TTL
 CCDGT0 .WWW STCOMPR .RSC
 STDEMO .PRG READ .ME
 DISKICON.PRG DISKTOP .INF
 STSPEECH.TOS



3

XLISP LANG. Disk 33
 ART .LSP INIT .LSP
 XLBFUN .C XLINIT .C
 XLMATH .C CTYPE .H
 MATH .H XLCONT .C
 XLIO .C XLOBJ .C
 DESKTOP .INF OBJECT .LSP
 XLDBUG .C XLISP .C
 XLRIN .C EXAMPLE .LSP
 QUEENS .LSP XLEVAL .C
 XLISP .H XLSTR .C
 FIB .LSP QUEENS2 .LSP
 XLFIO .C XLISP .INP
 XLSUBR .C HANOI .LSP
 README XLFTAB1 .C
 XLISP .TTP XLSYM .C
 HDWR .LSP SETJMP .H
 XLFTAB2 .C XLJUMP .C
 XLSYS .C IFTHEN .LSP
 STSTUFF .C XLGLOB .C
 XLLIST .C

GENERAL 1 Disk 34

All sorts of Demos, Desk Accessories, STBasic, Logo Programs.
 DRAGON .BAS PIANO .BAS
 SWITCHBX.BAS JOURNEY .BAS
 STMAST .BAS VDISHOW .BAS
 AMIGABA2.PRG HEXES .PRG
 MONODEMO.PRG PIEMOVE .PRG
 ANTICX .PRG KLIEDO .PRG
 MOUNTAIN.PRG POPCORN .PRG
 DESKTOP .INF ANACLOCK.ACC
 BREAKOUT2.ACC DIRPRINT.ACC
 RAMDISK1.ACC BICAL2 .ACC
 CALENDAR.ACC DISKMAN .ACC
 RAMDISK2.ACC BICAL2 .DOC
 DIGICLOK.ACC MITES .ACC
 SQPUZZLE.ACC ICONEDIT.TOS
 RAMSHOW .PRG TINYSTUF.PRG
 TINYVIEW.PRG DOODLER .LOG
 INSTANT .LOG SPEED .LOG
 TEXTDEMO.LOG IMAGES .LOG
 MODERNE .LOG STDOODLE.LOG
 FONEBOOK.DAT READ .ME
 STMAKHL.PRG XMODEM .HLP
 HELP .OUT READ .ME2
 STXMODEM.PRG XMODEM .TXT
 GRAFCON .PRG KOALADEG.PRG
 NEOCONV .PRG PIXLATE .PRG

FRACTALS.1 Disk 36
 Fractals generator program.
 FLAKE .C FLAKE2 .C
 FLAKE3 .C FLAKE .PRG
 FLAKE2 .PRG FLAKE3 .PRG
 FRACT1 .C FRACT2 .C
 FRACTAL4.C README .DOC
 FRACT1 .PRG FRACT2 .PRG
 FRACTAL4.PRG KOCHFILL.C
 MOUNT .PRG SOMB .PRG
 USER .PRG APSTART .O
 GEMUTIL .O MNLDDEFS.H
 MNLDZOOM.C README .DOC
 C .BAT LINK .BAT
 MNDLRSC .H MNLDZOOM.O
 GEMUTIL .C MNDLCALC.O

MNDLRSC .RSC MNLDZOOM.PRG
 DROP2 .C MVLINE .C
 MVLINE2 .C MVLINE2 .O
 README .DOC DROP2 .PRG
 MVLINE .PRG MVLINE2 .INP
 MVLINE2 .PRG

BUBBLES.DEM Disk 37
 Shiny bubbles demonstration.
 (Colour only)
 READ .ME SB .DBA
 SB .PRG
 PARROT.DEM Disk 38
 Flying bird demonstration.
 (Colour only)
 BIRD1 .ANI BIRD1 .BRD
 BIRD2 .ANI BIRD2 .BRD
 BIRDBRD .PRG

ASTDEMO Disk 39

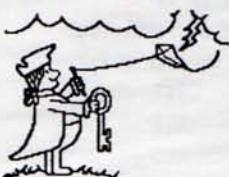
ASTDEMO .PRG DEMO1
 DEMO2 DEMO3
 DEMO4 DEMO5
 DEMO6 DEMO7
 DEMO8 DEMO9
 DEMO10 DEMO11
 DEMO12 DEMO13
 DEMO14 DEMO15
 DEMO16 DEMO17
 DEMO18 DEMO19
 DEMO20 DEMO21
 DEMO22 DEMO23
 DEMO24 MUSPOP1 .PIC
 DESKTOP .INF MAG21 .PRG

DEMO.4 Disk 40
 Various demonstrations.
 BALLIT .PRG BALLS1 .DAT
 PIC000 .NEO BALLS0 .DAT
 SPEAKTEX.TOS

CP/M EMULATOR Disk 41
 CP/M 2.2-Z80 Emulator for the Atari ST.
 Distributed by authority of MOBEX
 AP .CAT B00659 .CAT
 CU62 .CAT KU660 .CAT
 UKSUB .FRM BOOG .CAT
 CPMBB38 .CAT DSKORDER.CAT
 MEMSHIP .CAT DDTZ .DOC
 GEMU .TXT HAPPY .TXT
 CALC .ACC DOCUMENT.CPM
 PRINTDIR.DOC READ .ME
 CALENDAR.ACC EMUIO .PRG
 PRINTDIR.PRG TEST .DIR
 CPMZB0 .TOS EMUIO .S
 PRINTDIR.RSC

HACK Disk 42
 HACK .DOC HACK103 CNF
 HACK103 .STW HACK103 .TTP
 HELP HH
 RECORD RUMORS

GAMES.2 Disk 43
 ADVENT .TOS ADVENT0 .DAT
 ADVENT1 .DAT ADVENT2 .DAT
 ADVENT3 .DAT ADVENT4 .DAT
 ADVENT5 .DAT ADVENT6 .DAT
 ADVENTR .DAT CATALOG .DOC
 DESKTOP .INF READ .ME
 BAUER .PIB DAME .PIC
 LAEUFER .PIB SPRINGER.PIC
 BAUR .PIC KOENIG .PIB
 LAEUFER .PIC TURM .PIB
 DAME .PIB KOENIG .PIC
 SPRINGER.PIB TURM .PIC
 POOLMONO.DOC POOLMONO.PRG
 ICONEDIT.PRG ICONEDIT.DOC
 KRABAT .PRG KRABAT .DES



ARC FILES

In geometry, we are all taught that an arc is a section of the circumference. Later, in electronics, it is when a large potential difference occurs between two points and the air gap breaks down resulting in a large electrical discharge, where the spark is called the arc. Crows often are heard calling "ARC ARC". Noah sailed in the Ark. The Bible refers to the ARC of the Covenant but from its very exact description fits with electrical theory to be the electrical arc generator made from a capacitor of several farads. But what is ARC in our jargonistic computer buzz word lingo?

On the computer with disk drive, we are taught when using basic to label the files saved with the extender ".BAS" The machine language or object files are given the extender ".OBJ" and files written in action ".ACT". All these files use heaps of disk space. Each file requires memory for the DIRECTORY, for the pointers, for the variables, for the program itself. HEAPS OF MEMORY consumed by going over the same trivia again and again. How inefficient! How boring!

Every file takes up more memory than it needs. In my collection there may be a couple of hundred disks. Obviously there is much space that can be used that is currently lost to delinquent file management, not of my making.

What if the files were amalgamated into one and then archived away for later retrieval? ARC-hive???



Exactly! Most 8 bit files are saved as 8 bit and 16 bit as 16 bit. What about compacting the files, removing the nulls and stripping the file of every un-necessary bit. Later to be re-formed, separated into real files.

This is what "ARC" is all about. A program of 12K can be crammed into a 6-K slot, add another 16K file in 10K, a few more and there is the ARC file nicely crammed into some 200 sectors. It is now obvious, that to have the facility to DE-ARC means that you can store many programs in the same space as one and retrieve them when needed.

In terms of file transmission by modem (if Telecom go ahead with timed calls) means that 4 or more files can be downloaded in the time currently taken to download one. Contact with Atari Corp USA BBS services (one of the seven) will reveal that all files including the arc and de-arc programs are in ".ARC" format. Most USA BBS systems are going full ".ARC" due to the fact that the USA FCC has initiated laws to enforce timed data traffic charges effective Jan 1st 1988. "ARC" files are the way that we must as a group go, to better efficiency.

The BIG Problem:-

"ARC" files require that the computer has enough user memory to DE-ARC. The ST users have so much memory it is not worth the worry. The 8 bit users need at least 48K, and a disk drive or two. The 400/800/XL/XE with 32K after DOS can de-arc. A BONUS ON THE INSIDE INFO DISK IS WHAT YOU NEED.

Shortly, all files on the ACE RACS(BBS) will all go ".ARC". So, on a disk, at single density, double sided, there can be three disks full. Gosh, it costs \$6.00 a disk,,, what if you got two for 1 or better? Is that beneficial. All one needs to worry about is the free disk space when the file are de-arc'd. It is without a doubt, the best thing since pineapple jam.

Special thanks to Leslie Sharpe of Cobar for downloading the USA files giving us all a new direction. Tony McGrath of Sydney for explaining the principles and what it was all about. Finally to Peter Meggarity of Penrith for experimenting and noting the solution. All their contributions came together in this article. To them we owe much. They are the authors, not me.

8 BIT SOFTWARE

by Jeffrey Maddock

EXCHANGE

There have been a few changes in the software exchange since the last Inside Info was released.

First off, Philip Hayne, a very good friend passed away. Philip was our the software officer, for both 8 and 16 bit. We will miss him greatly. The software exchange was taken on by Peter Meggarity (the vice president).

Peter's work commitments were great and so the software exchange was passed on to me, Jeffrey Maddock. As Colonel Oliver North once said on T.V., "THE BUCK STOPS HERE". I will now say that the Software Exchange stops here with me until the general elections in November.

Craig Armsworth took over the ST side of the software exchange as well as being editor. Craig tried to do to much and his own life style suffered. So much so, he resigned from both jobs.

The committee have been working under tremendous difficulties. There have been numerous phone calls and letters saying that the software exchange is taking too long in satisfying all orders. This we recognise. From my point of view, I can only promise you that I will try to fill any software orders that I receive in the mail within two week of receiving your order.

Tony McGrath is now handling the ST software exchange. The list of ST software available in next inside info. Larry took on the editor's job. Obviously the committee is under much strain and pressure.

All the software disks that have been published in Inside Info Vol#29 are all available from the software exchange. I am also releasing 4 new disks this month and they are Page 6 Vols# 12, 13, 14 and a machine language text

Adventure called "PIRATES BOOTY", on the back side of this disk is a bonus program called "WHEEL OF FORTUNE". Both of these programs are Auto Boot disks.

Here is a list of 8 bit Software available at meeting or by mail from the software exchange:

A.C.E.(N.S.W.) SOFTWARE LIST as of AUGUST 1987

Inside Info Vol 1 \$6
Covering programs from
Issues #1-6
LOTTO BAS SPIRALS BAS
SELECTORBAS GR8TEXT BAS
SHELL BAS ANTIC4 BAS
GTIA1 BAS GTIA2 BAS
GTIA3 BAS GTIA4 BAS
GTIA5 BAS GTIA6 BAS
DOS SYS ORGAN BAS
ATARI BAS GTIADEMOBAS
AUTORUN SYS BALL BAS
BRASS BAS CONE BAS
DIZZY BAS ESCAPE BAS
GRENHOLEBAS HYPNOSISBAS
MELON BAS POLES BAS
PSYCHED BAS ROLLS BAS
SAS BAS STRIPES BAS
WHIRL BAS MASTMINDBAS
SNAKE BAS SQUARES BAS
COLOURS BAS FLASH BAS
MENU PACMAN BAS
CHESS BAS DOGGIES BAS
PROGLISTLST GRAB BAS
BOXES BAS GREEK BAS
ROSE BAS

Inside Info Vol 2 \$6
Covering programs from
Issues #7-10
FINESCRSLSRC FINESCRLBAS
DOS SYS HORIZSCRLBAS
BLOCK BAS MENU BAS
CATALOG BAS CLOCK BAS
SUMS BAS POLYGON BAS
POKER BAS DOODLER BAS
STRETCH BAS CREATE BAS
MULTCOLRBAS SELECTORBAS
AUDCTL BAS DIVISIONBAS
MULTIPLYBAS IMPFRACBAS
ADDFRACBAS EQUFRACBAS
SUMS2 BAS CARTOONSBAS
DOGG DAT HAGA DAT
CHAR DAT PLUT DAT
MICK DAT GOOF DAT
ANDY DAT BAMM DAT
MENU AUTORUN SYS



Inside Info Vol 3 \$6

Covering programs from

Issues #11-15

CURVES BAS NEWTON BAS
 FUNCTIONBAS WALLPAP BAS
 SNOWFLAKBAS GRAPHICS BAS
 PIA4MAT BAS LINEDITALST
 MINATERMBAS SECTREADBAS
 LIGHTPENBAS MOVIE BAS
 MILLION BAS AUTOMENUBAS
 MULTCOPYBAS SECTEDITBAS
 GOBBLER BAS TINYTEXTBAS
 GRAPHS2 BAS CHARMAKEBAS
 CHARPEEKBAS DOS SYS
 AUTORUN SYS MENU

Inside Info Vol 4 \$6

Covering programs from

Issues #16-18

GRUBS BAS WILDWESTBAS
 WILDWESTLST CRICKETS BAS
 STRARRAYBAS INVRTSTRBAS
 DIAMOND BAS OPTICAL BAS
 OPTICAL SRC LAZYDUMPLST
 GRDEMO BAS BOOTLOADSRC
 BOOTLOADBAS FUNCT3D BAS
 COLRMIX1BAS COLRMIX2BAS
 APPEND BAS VIEWPIC BAS
 DOS SYS AUTORUN SYS
 MENU

Inside Info Vol 5 \$6

Covering programs from

Issue #19 + Bonus Programs

LHANDLERBAS DOS SYS
 FILESECTBAS SOUNDFX1BAS
 SOUNDFX2BAS SOUNDFX3BAS
 SOUNDFX4BAS SOUNDFX5BAS
 SOUNDFX6BAS SOUNDFX7BAS
 SOUNDFX8BAS SOUNDFX9BAS
 ANTENNA BAS SMARTSHTBAS
 DOLLAR BAS AUTORUN SYS
 MENU LABEL BAS
 COMOKILLBAS CHEQUE BAS

Inside Info Vol 6 \$6

Covering programs from

Issues #20-21

STRINGS1BAS STRINGS3BAS
 STRINGS4BAS STRING5BAS
 SCRNDUMPBAS SCRNDUMPACT
 LISTER3BAS ELECTRICBAS
 BORDER1 BAS BORDER2 BAS
 CAD BAS SENTENCELG0



Inside Info Vol 7 \$10

Covering programs from

Issue #22

Side A
 BULLANTS BAS DEADLINEBAS
 CALENDARBAS WINDOWS1BAS
 WINDOWS2LST TARGET BAS
 RAMDISK BAS RAMDISK SRC
 INVBLANKBAS POKERMACBAS
 PM1 BAS PM2 LST
 PM3 BAS PM4 BAS
 PM5 LST ZOOM SRC
 BIORYTHMBAS OBLIGHT BAS
 DOS SYS AUTORUN SYS
 MENU

Side B

GANGSTERBAS MEMORYS BAS

SAMMY BAS INVENTORYBAS
 DOS SYS DUP SYS
 AUTORUN SYS MENU

Inside Info Vol 8 \$6

Covering programs from

Issues #23-24

DOS SYS FONTWIDE BAS
 HANGMAN LGO PARKSRLBAS
 PARKSRLSRC PICLOAD BAS
 PICSAVE LGO PMGVBI BAS
 PMGVBI SRC RAINBOW BAS
 RAINBOW SRC SDUMP7 BAS

Inside Info Vol 9 \$6

Covering programs from

Issues #25-26

EMPLOYEE LOGODUMP SRC
 LOGODUMPBAS PAYMAST BAS
 WAGE BAS SALARY
 TAXFILE BOUNCE BAS
 STATMENU BAS TAXSORT
 PYRAMID BAS PLANETS BAS
 TIMES BAS PEARSON BAS

Inside Info Vol 10 \$10

Covering programs from

Issues #27-28

Side A
 BIG1 DAT FORKLIFTBAS
 IFS BAS LASERGUNBAS
 ONGOS BAS UPLIGHTSBAS
 CHARGEN BAS LOTTO BAS
 LOTTO PIC LOTTORUNBAS
 MFORM BAS MSHAPES BAS
 SPACMATHBAS STARBIRD BAS
 VOICE DIG VOICPLAYBAS
 ACETYPO BAS AUTORUN SYS

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Covering Page 6 Issues #1-3

SECRET BAS LINELISTLST
 VULTURES BAS MOREMODEBAS
 PHASE BAS BANNER BAS
 CYLINDERBAS GTIADEMOBAS
 FOURAROWBAS CIRCLES BAS
 CARDS BAS TEXTWINDBAS
 DISKDIR BAS TINYTEXTBAS
 CALENDARBAS CRICKET BAS
 CHARGEN BAS OVAL BAS
 RECTANGLBAS CHARDES BAS
 MASTDIR BAS DOS SYS
 DUP SYS MENU
 AUTORUN SYS

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LUNARV BAS MAGICSQ BAS
 SPIDER BAS TIMING BAS
 GRAB BAS DISKSORTBAS
 FINANCE BAS HELLO BAS

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STING BAS SQUARES BAS
 VERTPM BAS TYPO LST
 COLOUR BAS SHORT BAS
 BINARY BAS DOWNLOADBAS
 SCRAMBLE BAS TABLES BAS
 MUSIC BAS DODGER BAS
 HYPNOSIS BAS AUTOBAS BAS
 DOS SYS DUP SYS
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HORRIS BAS HORZSCRLBAS
 PMSTRINGBAS BREAKOUTBAS
 TEXTDRAWBAS GR8DEMO BAS
 MINIDOS LST SCREEN BAS
 DIAMOND BAS GR10DEMO BAS
 SPINNER BAS ULTIMATEBAS
 HOUSE BAS DOS SYS
 DUP SYS MENU
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GRID BAS COLRFLWBAS
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 LANDSCAPBAS FLAGS BAS
 MENU RESET BAS
 DOS SYS SQUIRRELBAS
 AUTORUN SYS RESCUE1 BAS
 DUP SYS RESCUE3 BAS
 BOOKMARKBAS VARSORT2BAS

side B

MENU AUTORUN SYS
 VARSORTILST RESET LST
 LINELST3LST RESCUE2 LST
 RENUMBERLST GANGSTERBAS
 DOS SYS DUP SYS

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CAROLBAS CAROLBAS OBJ
 TRIANGLEBAS GR9DEMO BAS
 SWAN1 BAS SWAN2 BAS
 BOMB BAS LHANDLERBAS
 DOS SYS CAMELOT BAS
 SYNTH BAS ANIMATORBAS
 BULLANTS BAS MUSICMAKBAS
 RESCUE4 BAS DUP SYS
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Covering Page 6 Issue #14

RAINBOW1BAS RAINBOW2BAS
 COUNTER BAS TYPOII BAS
 ANIMATE BAS CHARCODEBAS
 SUPPLY BAS CROSSWRDBAS
 ACCESS3 BAS ACCESS3 OBJ
 DEPTHCHGBAS DOS SYS
 DUP SYS AUTORUN SYS
 MENU

Page 6 Vol 8 \$6

Covering Page 6 Issue #15

WANDERERBAS ONLINE BAS
 PMG BAS KANGA BAS
 BOOSTER BAS BOOSTXL BAS
 TICKTOCKBAS AUTOCAR1BAS
 DOS SYS DUP SYS
 AUTORUN SYS MENU



DOS	SYS	DUP	SYS	Covering Page 6 Issue #21
AUTORUN	SYS	MENU		DOS SYS DUP SYS
FONT1	SET	BLACKBOX		AUTORUN SYS MENU
CHPLOT1		CHPLOT2		FONT21 SET REVENGER
CHPLOT3		CHPLOT4		GRAPHDEM PLAYDEM
FREEWAY		FREEWAY SRC		GRAPHDLISRC PLAYDLI SRC
DRAUGHTS		TABLES		DISASM TRAIN
GRAPH				CRAZY 2 FORKLIFT
				OXO SCALEMAS
				TEMP

Page 6 Vol 10 \$6

Covering	Page	6	Issue	#17
DOS	SYS	DUP	SYS	ANTIC's STELLA TRIO \$6
AUTORUN	SYS	MENU		This disk contains the following three
FONT17	SET	RENUM		machine language programs on a menu
SHOOTING	TARGET	OBJ		loader.
ANTIC1	ANTIC2			DOS SYS MEM SAV
ANTIC3	ANTIC4			GAUNTLETEXE ORBITAL EXE
ANTIC5	ANTIC6			DEFENSE EXE AUTORUN SYS
XYZAP	CASTLE			ANTIC's PROGRAMMERS DESIGN TOOLS \$6
LABELS	INLAYS			DOS SYS AUTORUN SYS
SPIRALS	TABLES			DATABASE FONTEdit

Page 6 Vol 11 \$6

Covering	Page	6	Issue	#18
DOS	SYS	DUP	SYS	FORMATIX LABL6EMIBAS
AUTORUN	SYS	MENU		MENU MLMENUMK
FONT18	SET	BERTIE		PMDESGNR PROGLIB
BERTIE	2	MASK		PROGSORT RENUM BAS
TYPO3	DLIST1			RPMTEST BAS SKETCH
DLIST2	DLIST3			SOUNDLAB SUPERDUPSYS
DLIST4	STARS1			ANTIC's C.U.E.S. Education Disk #1 \$6
STARS2	STARS3			DOS SYS BAGELS
STARS	ASM	FIREWORK		TRAP GEOGRPHY
GRANPRIX	GP	OBJ		ROMANS MLTBINGO
BLITZ	GAME			SCRAMWDS SINEWAVE
LISTER	DRAUGHTS			HANGMAN BOURREAU
				FANROSE NMSTATES
				MATHQUIZ STATECAP

Page 6 Vol 12 \$6

Covering	Page	6	Issue	#19
DOS	SYS	DUP	SYS	MENU AUTORUN SYS
AUTORUN	SYS	MENU		INTRO SYS DIVISION
FONT19	SET	SNOW1		ANTIC's C.U.E.S. Education Disk #2 \$6
SNOW2	CHASE			DOS SYS DUP SYS
MAGFILE	SECTOR			AUTORUN SYS MENU
SECTOR	DAT	SYNTH1		MULT FUNCTION
SYNTH2	LOCATE			REMAINDR SPELLBEE
YNKEY	DLIST5			AMERICAS STATES
DLIST6	DLIST7			METRICS SUPRLETR
DLIST8	DLIST10			MATHPK6
DLIST11	DLIST12			ANTIC's ASTRONOMY & METEOROLOGY \$6
DLIST9	SRC	DLIST13 SRC		ASTRONOMY HALLEY
DLIST14	SRC	DLIST15 SRC		HURICANE PLNTARUM
DLIST16	SRC			SOLARSYS DOS SYS
				DUP SYS MENU
				AUTORUN SYS

Page 6 Vol 13 \$6

Covering	Page	6	Issue	#20
DOS	SYS	JT1	PIC	ANTIC's KERMIT EMULATOR \$6
AUTORUN	SYS	FONT20	SET	This is for file transfers between
MENU		DLIST17		computers, and is ideal for 8-bit/ST
DLIST18		DLIST19		porting.
DLIST21		DLIST22		ANTIC's HOMEPAK CUSTOMIZER \$6
DLIST23		BLOCK		Batteries Included's HOMEPAK program is
GRAPHICS		PALETTE		a highly usefull trilogy of tools and
PICLOADA		ATTRIBS		this disk allows you to customize many
TRANSYL1		TRANSYL2		of it's functions to your liking. It
CIODUMP		SLIDES		also allows DOS 2.5 ramdisks for
OXO	LST	OXOINTROLST		

Load MICROPINTER, KOALA PAD,
FONTS & TEXT files straight from DOS,
with sample pics & fonts.

DOS	SYS	FANCY1	FNT
DUP	SYS	FANCY2	FNT
FANCY3	FNT	GOTHIC	FNT
MODERNE	FNT	FANCY	FNT
AVANT	FNT	BLOCK	FNT
JERRY	FNT	JIGSAW	FNT
HEBREW	FNT	HIERO	FNT
SCRIPT	FNT	COMPUTERFNT	
STRANGE	FNT	STOP	FNT
SPACE	FNT	ROMAN	FNT
GREEK	FNT	OUTLINE	FNT
POOH	PIC	FOG	PIC
BLUANGELMIC	PIC	GRIFFIN	PIC
SNOW	PIC	BOAT	PIC
SUN	PIC	GIRL	PIC
SUNSET	PIC	WEEDS	PIC

ANTIC's FAST FUN #3 \$6
This disk has 6 all machine language
games on a multi boot disk. Just BOOT
this disk in drive one and pick the
game you want to play.

AUTOMENU	SMUSH	EXE	
FROGGIE	EXE	CHOMPER EXE	
ROUNDUP	EXE	XEVIOUS EXE	
NORDIC	EXE		
ANTIC's Essential Utilities \$6			
DOS	SYS	DUP	SYS
MENU			AUTORUN SYS
SYSTAT	SYS	SYSTAT	BAS
FORMAT	BAS	EPSONLBLBLIG	
SEPARATE		SETUPPTRBAS	
PROTECT	BAS	KEYBOARDBAS	
RUNTIME	BAS	DISASM BAS	
EPSONTYPIST		DISKTAPEBAS	
EPSONLBLSLML		LOADPLUS	
AUTOTYPE		AUTODATA	
XREF	BAS	EPSONLISTER	
RPMCHECKBAS			

W H E R E

I S

Y O U R

S U B M I S S I O N

T O

I N S I D E

I N F O



ANTIC's DOS 4 \$5

This DOS was made by ATARI for the ill-fated 1450XL and cost over \$100,000 to develop, the cost to you, \$5!. Here are it's features:

Fast : two/three times faster than DOS 2/2.5/3
 Density : works with Single, Enhanced & Double.
 Help : Around 100 Pages of On-Line help files.
 Config : You can configure lots of things to your own style.
 Redirection: You can Redirect between devices.
 Gobasic : It can Autorun BASIC programs.
 RS-232-C : Load the 850 Interface handler anytime you want.
 Read DOS# : Transfer DOS 3 & DOS 2 files to DOS 4 format files.
 Directorys : One key disk directory of any disk drive.

ANTIC's MONITOR/DEBUGGER \$6
 This disk has two main programs. A Machine language Monitor and an Enhanced Basic extender for DOS 2.5: The MONITOR has these features. Display regs, Dump to printer, Trace program, Single Step, Dissasemble memory, Execute programs, Hex arithmetic, Move Memory, & more. All needed doco is on the disk

The ENHANCED BASIC also has lots of features. It is a mini DUP.SYS that works with DOS 2.5 and an XE with ramdisk (it also works on the 800XL). Here are the features and note all these work whilst keeping your program in BASIC safe. Directroy of drive 1/2/8 Erase file, Rename file, Binary Load, File Move/Copy/Dupe, & more including the FASTEST Renumber I have used, and yes it works fantastically!. DOCO & source codes are also on the disk. The following programs are also on this disk:

CONVERT BAS : A DOS 3 to DOS 2/2.5 file converter.
 MULTICPYBAS : The best Multi File Copier I have used.
 RAINBOW BAS : This prints multi-colored text file on a 1020 printer.
 DEREZ BIN : This clever program converts KOALA Pics to GR.8 Screens composed of Ascii & Graphic Codes, and has to been seen to be believed.

ANTIC's TRIVIA QUIZ \$6

This fun disk has a great ATARI version of 'Trivial Pursuit'. Up to 3 players (XL/XE up to 2 players). There are 350 questions and more can be made with the included Question Maker.

The back side of this disk is the TRIVIA QUIZ Questions data disk.

SHOW-OFF DISK

Vol 1 \$6

This fun disk has the following BASIC and Machine Language programs.

DOS	SYS	AUTORUN SYS
MENU		CONTENTS
APPLEKILDAT	TOPTUNE1DAT	
TOPTUNE2DAT	TOPTUNE3DAT	
TOPTUNE4DAT	APPLEKILBAS	
TOPTUNESBAS	BOUNCE OBJ	
ROBOTDEMOBJ	COMOKILLBAS	
BALLSONGOBJ	JANES OBJ	

There is also a multi-colored disk menu.

SHOW-OFF DISK

Vol 2 \$6

This disk contains the following all machine language DEMO programs.

FUJIBONK	EARTH	STARS
PLAYERS	PAPERWGT	SWANIE

ADVENTURE COLLECTION

Vol 1 \$6

KIDNAP.BAS	Escape from the dungeon of the gods.
PHARAOH.BAS	Kidnapped.
ESCAPE.BAS	Operation Sabotage.
OPSAB.BAS	Curse of the Pharaoh

ADVENTURE COLLECTION

Vol 2 \$6

ADVENT5DBAS	Adventure in the 5th dimension
CRASH.BAS	Crash Dive.
VANDEN.BAS	Adventure at Vandenburg Air Force Base.
UNCLE.BAS	Mean old uncle Henry.

ATARI XL/XE TRANSLATOR DISK \$6

This disk is the official ATARI Translator for XL and XE owners. It provides a replacement operating system similiar to the 400/800 Rev 'B' OS. This disk is double-sided, side A being for normal use, while side B is for heavy translation and also for DOS 3. Use this disk to run all the programs that will not run on the XL/XE computers.

FIG-FORTH \$6

This is the FORTH Interest Group's version 1.4s implementation of the language. With full extensions of special ATARI verbs and commands for sound, graphics, and I/O. Complete with doco sheets.

COMPUTER CRICKET \$6

This is a game by K.J. BRICKNELL, simulating limited overs and full series cricket. The game features user defined or real team players, one or two player option, a full scoreboard, Richies summary, and printout of game stats at end of play. Game doco is also on the disk.

DIGITISED PHOTOS \$6

This disk contains four R-rated digitized images in the GTIA mode. The images can be viewed in each of the three GTIA modes and in any color, in addition to a pulsating color flow.

SLIDE SHOW Vol 1 \$6

This is an excellent demonstation disk to show the fine artwork that can be achieved on the ATARI. The pictures were all drawn by Ian Champ using the ATARI Touch Tablet. Each picture is displayed for 30 seconds then faded out to the next picture like a video mixer. Also included on this disk is RAMSLIDE.BAS which is for the 256K XL and 130 XE, it loads all the pictures into the extra RAM and displays them as fast or as slow as you want them to display.

WAL	MIC	DOG	MIC
PUPPET	MIC	GOLF	MIC
TED	MIC	DRUNK	MIC
FRED	MIC	JOHN	MIC
CHARLIE	MIC	BUDSPOREMIC	
RAMSLIDE	BAS		

DOS 2.5 \$5

This is ATARI's latest DOS. It is upwardly compatible with DOS 2 and includes a DOS 3 to DOS 2.5 converter. Like DOS 3 it has two modes of density: SINGLE (800) and ENHANCED (1050), but with a file structure comon to both. Includes doco sheets.

AMERICA'S CUP \$8

by Ken Hall

This is a surperb simulation of the America's Cup contest between Australia II and Liberty. Ken's in depth simulation allows you to take advantage of wind/weather changes, sea depths, craft parameters and allows you to sail one of the six Newport courses. Complete with 10 page booklet.



COSMIC CRUSADERS \$6

by Joe Delman

This game is a SIMULATION type game not an Arcade game. Become warlord of the cosmos as you conquer planets, by using brute strength or quiet diplomacy, you build up an empire so large that it installs fear into your enemies. Joe's Cosmic Crusaders enables up to nine players to battle, but remember only one can be victorious.

M.A.C.E. Fractals \$6

Double sided disk

This disk contains a set of programs to generate multicoloured fractal images in GR. 7+ and saves them to disk for a slide show (included). The flip side of the disk contains a new Slide Fader program to display the 18 included finished fractal pictures.

M.A.C.E. PRINTSHOP GRAPHIC ICONS

Vol 1 \$6

This is a 'Printshop' Data disk of ICONS put together by our fellow Melbourne A.C.E. and contains over 100 terrific icons to jazz up your P.S. cards and signs etc

A.C.E. 'C' \$6

This is the second of our Language disks (the other is FIG-FORTH) and is a 8-Bit version of the popular language of 'C'. It has been enhanced with full library routines for Graphics & PM and sound etc. It is similar to ACTION! in many ways but it's transportability is one of it's main features. 'C' is the most common language on the ST computers and now the 8-Bitters can ride the wave of it's popularity. Requires a Text Editor or Wordprocessor to enter in your source code.

SUPER DOS V4.3 \$4

includes full DOCO

This is the latest SUPERDOS from Super Products, Qld. It is a very extensive DOS that works in single, enhanced & double density, ramdisk support with auto load of files to ram, very memory efficient, can handle lower case and inverse filename, color-coded screen border for read/write, verify toggle. Also includes an Xtended DUP with functions to restore files, file tracer XL/XE key repeat, DOS 3 converter, and SUPERBIN and SBAS to make binary and basic boot menu disks. SUPER DOS is made available to us by Will Visser and Paul Nicholls and is distributed free, excluding media and photocopying costs.

A.C.E.(N.S.W.) CHRISTMAS DISK

1986

\$6 (Double sided disk)

This disk has a beautiful selection of christmas programs, and a season greeting SPOKEN by our President!. And to top it all off some GAMES for you to while away the time!

PIRATES BOOTY \$6

side A

**Machine language TEXT Adventure
(100 rooms)**

This text Adventure was written by Stephen Bradbury of A.C.E.(N.S.W.) using Adventure Master. I would give this adventure a rating of 5 out of 10. But don't get frustrated when you can't solve it because there is a map and hints coming soon in a later issue of Inside Info.

WHEEL of FORTUNE (BONUS)

side B

This program is on the back side of 'Pirates Booty' and is one of the best playable programs I have played and I fully recommend this game to all. The A.C.E.(N.S.W.) Committee has included this program as a BONUS because we on the Committee believe A.C.E.(N.S.W.) members deserve a BONUS.

CITIZEN 1200

by Mark Driver.

So you want to buy a Printer! Well I've just got the one for you. Letter quality and many,many,many well chosen fonts. Lets take you through some of the features:

Impact Dot Matrix

Draft characters 120 cps.

Correspondence quality 24 cps.

Epson-FX configuration including 96

regular,

96 italic

32 characters for each of 11 countries,

32 graphic characters

and an extra feature is IBM graphics.

But you ask, what is the price of this printer?

Well its no dearer than many printers on the market but a better price at around \$525 and if your buying it for the 600XL or 800XL and need an interface it will save you dollars by buying both, but only at Computer One.

This printer is quieter than a lot of printers I have heard and overall a very reliable compact unit.

This printer handles both single sheets (friction feed) and continuous sheets (traction feed). You can load the paper both from the rear and from under the printer, enabling to use the printer in many situations, which include using a printer stand. There is a lever for adjusting the thickness of the paper and all controls are from the front for ease of use and are clearly marked.

There are several internal switches which are easily accessable for adjusting settings. Some including:
Printing of graphics and accented characters
Page length
Slashed zeros
Line Spacing
Draft and correspondence quality printing
Pica and compressed pitch

Overall I personally recommend this printer if you are looking for one and am sure you will be as happy as I am if you purchase one.

THE PRESIDENT

ACE (NSW)

Dear Dr Grace,

Attention: Mr Craig Armsworth

It is with much emotion, I write to you and express my sincere gratitude for such a beautifully worded memorial by you, about your friend and my son Philip. It was most eloquent.

I wish to thank the President, the Committee members and all of Philip's friends of the ACE Club, for the wonderful bond of friendship which existed amongst you all; he did enjoy his role as a Committee member, which he found most interesting and challenging; it was a wonderful outlet for his love of computers and he was proud to belong to the ACE Club and what it stands for.

In granting me life membership, I am most appreciative.

Yours Sincerely
Coralie Hayne

FOR SALE

THE ESTATE OF THE
THE LATE PHILIP HAYNE

ALL ORIGINAL DISKS, CASSETTES AND ROMS
WITH FULL DOCUMENTATION

CONTACT

UNBELIEVABLE BARGAINS TO ALL

THE SECRETARY ACE NSW (JEFF MADDOK)
ON 02-568-2990 OR P.O. BOX 4514 GPO
SYDNEY 2001

WHAT IS AVAILABLE

===== THE DISKS =====

TITLE	MINIMUM VALUE
THE PARTY QUIZ GAME	\$40
JUMPMAN	20
SUMMER GAMES	20
BALL BLAZER	20
HOSTBUSTERS	20
ROSEN'S BRIGADE	20
O'RILEY'S MINE	20
LODE RUNNER'S RESCUE	20
FLIGHT SIMULATOR II	30
MERCENARY	20
TRACK ATTACK	20
SPY VRS SPY	20
TRAINS	20
ANCHON I	20
ANCHON II	20
ONE ON ONE	20
SAM	10
TIMBER	10
BAJABUGGIES	10
PATHFINDER	10
MATCH RACER	10
ABUSE	10
HAUNTED HILL	10
THE 4 IN 1 INFOCOM SAMPLER	10
SPACE TREK	10
CASTLE 2.0	10

PHILIP WAS A COLLECTOR OF "ALL" ATARI SOFTWARE. HIS REVIEWS/DEMONSTRATIONS WERE FOR THE BENEFIT OF THE MEMBERS. THE EXECUTORS OF THE ESTATE BELIEVE THAT CLUB MEMBERS WOULD WANT TO SHARE IN PHILIP'S LOVE OF ATARI. RATHER THAN SELLING AT RETAIL IN THE OPEN MARKET A MINIMUM VALUE HAS BEEN PLACED ON EACH ITEM AND THE COLLECTION SPLIT FOR ALL TO BENEFIT.

HOW TO ORDER

IF YOU WISH TO ORDER ANY, THEN PLEASE PLACE YOUR OWN VALUE ON IT ABOVE THIS MINIMUM. NOTE: THERE IS 1 ONLY COPY OF EACH, SO THE HIGHEST BID WILL BE ACCEPTED.

===== THE ROMS =====

DECATHLON	\$10
JUMPMAN JUNIOR	10
CROSSFIRE	10
OILS WELL	10
MINER 2049ER	10
JAWBREAKER	10
PENGO	10
SUPER COBRA	10
QIX	10
DONKEY KONG	10
PAC MAN	10

===== THE BOOKS =====

YOUR ATARI COMPUTER	\$10
BOOK OF ATARI S/WARE 1983	5
DOS II REFERENCE MANUAL	10
BASIC COMPUTER GAMES	7

===== THE TAPES =====

ZEPPLIN	\$5
PHAROH'S CURSE	5
DAN STRIKES BACK	5
ROBIN HOOD	5
HYPERBLAST	5
FIREFLEET	5
AIRSTRIKE	5
AZTEC CHALLENGE	5
THE CRYPTS OF PLUMBOS	5
SPIDER INVASION	5
GALACTIC AVENGER	5
SERPENTINE	5
GENETIC DRIFT	5
PACIFIC COAST HIGHWAY	5

A CLAYTONS 8 BIT MOUSE

by Ray Pilgrim.

For those of you who are interested in hardware I would like you to swallow your pride and read on. The subject of this discourse is the Commodore Mouse, sorry I will only say that word once. The object in question is available at computer outlets for around \$80 and is a joystick replacement for use in GEOS, a Macintosh/GEM type user interface available on the C64.

Some months back I crossed my fingers and purchased one, reasoning that it should work on my ATARI 8 bit computer. After getting it home I plugged it in and booted up RAMBRANDT, an extremely good paint program available from ANTIC's CATALOG (cat.no. AP0157). The mouse performed similarly to a joystick but gave a finer control when drawing complex curves/lines. Do not think that it is anywhere as good as a mouse on a S20ST though, it is somewhere between that and a joystick. It came into its own when doing "rubber band" type drawing as it was a lot quicker than a joystick when getting to another place on the screen. I use it mainly when copying drawings onto the screen which I have traced onto clear plastic film from books etc., the clear film is taped in place over the drawing area of the screen. The mouse does have its drawbacks however, particularly in moving in a straight line, so it is not well suited to some applications.

The mouse has two buttons, only one however, the left one, does anything. It is the trigger button obviously, the other button does something on the C64 or as I suspect, the AMIGA, sorry again. The right button does not do anything to harm the ATARI though. Some enterprising Hardware Hacker may find a way to rewire the button to get it to work, perhaps one of the other trigger buttons, but it would be obviously only for your own software as most software would probably not ever look at the other trigger button.

For those interested in programming for the mouse it returns the same values as an ATARI joystick.



The following program produces the values listed below.

```
10 J=PEEK(54016):PRINT J
20 GOTO 10
```

VALUES

STICK(0)	PEEK(54016)
15	255
14	254
13	253
11	251
7	247
10	250
6	246
5	245
9	249

EASY STUFF

by Lance Munday, South Penrith

One of my pet hates is typing in programmes from books and magazines, not being a good typist is I'm sure the reason why, and not being a good programmer is the reason why you've only seen one programme by me in Inside Info.

BUT I've found a way around both of these problems. "Ah," I hear you say, "What is this great and fantastic discovery that Atarians have been waiting for?". Well to tell the truth it's not new, it's not even mine, I "borrowed" the idea and I'm going to let you "borrow" it as well.

Yes you guessed it, short programmes that's the answer. Now so you can join in the fun of writing programmes for Inside Info let me tell you the rules, who knows if the idea catches on the club might even run a competition to find the best short programmer, now back to the rules;

RULE (1) Programmes to be a maximum of ten lines.

That's it. Now you know the rule, and now you know why it's EASY STUFF so how about some classy less than ten liners. My mini-programme is a Lotto selector, yes another one.

```
10 LOT=40:DIM PICK(LOT):FOR NUM=1 TO
LOT:PICK(NUM)=NUM:NEXT NUM
20 ? "[clear]":? "WELCOME TO THIS
WEEKS "" NUMBERS"
30 ? :? :? "WHICH SYSTEM WOULD YOU
LIKE":INPUT SYSTEM:
40 FOR NUM=1 TO SYSTEM: X=INT(RND(0)
*(LOT+1-NUM))+NUM:LOTTO=PICK(NUM) :P
ICK(NUM)=PICK(X):PICK(X)=LOTTO:NEXT
NUM
50 FOR NUM=1 TO SYSTEM:? PICK(NUM):"
";:FOR S=0 TO 3: SOUND S,6*NUM,10,8:
NEXT S:NEXT NUM
60 FOR S=0 TO 3:SOUND S,0,0,0:NEXT S:
GOTO 30
```



Well, what do you think, on second thought I'd rather not know. Here is another, I got this one from Atari User, June issue, it's a five liner by Bruce Black called Flashing Cursor;

```
10 FOR X=1536 TO 1614:READ A:POKE X,A:
NEXT X:X=USR(1536)
20 DATA 104,165,9,41,1,240,14,165,12
,141,43,6,165,13,141,44,6,169,1,133
30 DATA 9,169,39,133,12,169,6,133,13
,162,6,160,45,169,7,32,92,228,96,32
40 DATA 29,6,76,77,160,165,87,208,26
,206,78,6,208,21,160,0,165,93,81,94
50 DATA 41,127,208,6,177,94,73,128,1
45,94,169,23,141,78,6,76,98,228,32
```

Not bad is it? To change the cursor flashing speed POKE 1607,X, with X being a value between 0 and 255.

That's it for me for now. Now let's here from you.

Why is Inside Info so late???

To set the records straight; to understand what is happening...

History is written by many and is an interpretation of events. History should involve solid facts. However, while history is being created around you, many facts are difficult to see. The historian must rely on first hand accounts, as a witness, or assume the accuracy of emotive interpretations of other historians by research, or from the victim. It is difficult to sort fact from relevant information.

I am not going to hold myself open to litigation, unless it is for a worthwhile cause. The following is a brief account of the last six months, using all the historian's avenues for grasping information. You are the historians, and I am the bunny in the middle.

ACE NSW was and is, very healthy. Its committee was re-elected by a vote of confidence by the members. No positions were contested in 1986 for everyone was doing the job well. The only region of concern was the sysop telling tales of gloom with the bulletin board equipment failing (some say that it still requires a new modem)

The old line is that Disasters comes in threes. First, the bulletin board was killed by a rare phenomena, ball lightning. The glowing plasma cloud hit a nearby power pole and the 24 hour system went to half voltage, like a brown out.

The storm had passed and the BBS remained on line and working. Someone was actually on the line and downloading. There seemed to be no problems. The power was so low the monitor would not lock in. At this point along came the trusty electricity people, who proceeded to restore full power. Without warning there was a blinding explosion from the 15,000 volt line. All house lights went to full brightness plus, like flash guns popping, then nothing.

Both ACE NSW BBS and CSACE BBS vapourised! When power was re-established four hours later, the 520ST, and 5 other computers in the house failed to boot. I suspected something was wrong.

It took a week to fix the systems. Each drive kept spinning. They had to be refurbished including the HAPPY. I had few hours sleep.

The sudden and tragic loss to the club of young Philip Hayne of Avalon was something which caught us all by surprise. Many were totally ignorant of the tremendous job that Philip had been doing managing the software exchange for both the ST and the 8 bit machines. His passing meant a total re-organizing of the committee and a re-shuffling of responsibilities.

The committee's attempts to solve the problems internally were futile, what with the software exchange getting further behind and other jobs suffering to quell the daily growing backlog. This degenerated into a catch 22 as many had not heard, and we also had to satisfy complaints arising from matters beyond our control.

Some who tried to assist, got in the road, and others just ran out of time.

The third disaster was the announcement by Telecom of the proposed data service providers charge. This had the sysop running around in ever decreasing circles, assisting in the establishment of PRACSAA. (see Sysop's section).

The committee decided to separate 8 bit and 16 bit software. This month we welcome Tony McGrath as our new ST software officer. Jeff Maddock (the Secretary) is already over-worked and doing the 8 bit software.

The publication of Inside Info was one where we totally ran out of time. Inside Info No.31 was a month late as the editor had taken on the ST software exchange. This was the biggest Inside Info to date, breaking all cost records and was an exceptional achievement.

It was now August 1987, and issue 32 of Inside Info should have been ready. The editor had buried himself in his new job and was attempting to meet a tight university schedule to complete his studies. On the day of the committee meeting he was that swamped with work something had to go.

At that night's committee meeting I accepted the reigns of Inside Info on top of maintaining the BBS for both ACE and CSACE. I requested help. To compile

the mag in a month seemed an impossible task (what with my current 18 hour 7 day workload) for all necessary programs to be printed, "re-typed" and sent off for official printing, gee, a 2:00am stint every night. (its 1 am now).

"So, what articles have been received?"...I was given one tape and a few pages of hand-written documentation. "Into the valley of death marched the 500, no I looked in amazement, cannons to the left of me, cannons to the right...What have I got myself into?"

Despite the fact that the tape took 3 hours to load successfully, the single program it contained looked very interesting. Young Simon Ferret (15) had put together an amazing piece. I saw some fascinating structures and a few quick tricks. I liked it. It showed so much promise that I went through the code line by line and added a couple of extra features. Simon must receive full credit for this work and saving ACE

OK, the new format. . why no cardboard cover? It is too heavy for mailing and its weight is equal to several pages which I believe the members would like used for more info, more programs, and a better mag overall. The treasurer (like all treasurers) wants to cut down the postage and printing charges.

I am going to cram more in for the country members who use the mag as their contact to the world. Like them, I know how impossible it can be to get to a meeting, for it took me two years to get there. Inside Info must be the resource. Everyone out there is starving for great stuff and lets go troppo if we must. I want you to have the best that we can give.

The TV ratings people and politicians look at 1 reply=500 people. Over 50% of the membership has replied to the survey., that's eh 300 times our membership! I am taking notes and when I get a moment will do some stats. If you have not replied, then do so now. This is your club. So what if you live on the planet Earth, the message was nailed on the front door of the council chambers on alpha centuri. It is up to you to tell us what your needs are.

POWER WITHOUT THE PRICE
Larry

SURVEY 1987
Your Questions Answered
Part I

We are paying great attention to comments and criticisms that members have made.

Our aim is to be more professional in our approach, to the members, to the Atari products and to educate all who seek help.

The whole idea behind this survey was to find out where A.C.E.(NSW) can satisfy your requirements and needs.

Never before have we received such a tremendous response from the membership. We received approximately 60% return of surveys and more are coming in daily.

Following is a sample of some of your questions and comments which we believe need answering. The authors initials will precede the statements.

The following will be used:

S:.... statement
C:....comment
Q:... question
A:... activity
R:.... .RESPONSE

A:SOFTWARE EXCHANGE

C:There seems to be little attention being made towards cassette drive owners who would like to buy software from the "SOFTWARE EXCHANGE" but can't since all software is on disk. It would be appreciated to see software on cassette which can be bought.R.L.

R:We are seriously looking into this problem. The main stumbling block is that we do not have anybody with the necessary time and equipment to devote to the task. If anybody is prepared to help, we would be delighted to hear from them.

A:INSIDE INFO

C:Isolation from the meetings means that my only source of ATARI is through your Journal and the occasional magazine article. Is there any chance of finding out who else lives in my area so that we can get together and help each other... .J.P.

R:The committee believes that the membership data base, there addresses and the comments made by individuals in this survey should remain anonymous, private

and confidential. If you wish to send a letter to all members in your area, we suggest you write a note to the Editor of Inside Info for publication to draw other interested ATARI users living in your locality together. Please do not use your address, just your name and telephone number so they can contact you. Remember there are some people around who prey on your HI-TECH equipment.

A:MEETINGS

S:I have decided not to renew my subscription, whilst having the title of "A.C.E.(NSW)" it certainly would seem to be "A.C.E.(SYDNEY)" with little benefit for the country member. I have decided for the moment to join an interstate club, I can be no more disadvantaged, I believe some of these have more to offer their country members and have better newsletters (whilst I appreciate that not having made a contribution to it, I must take blame for this in part.) I wish the club well and perhaps in the future with new developments may rejoin it's ranks.....W.H.

R:It is a shame that you feel this way for we have tried our best and we will continue to better our record.

A.C.E.(NSW) wish to advance the educational side of computing with one of the best machines made. The committee and majority of members live from Newcastle through Sydney to Nowra. We actively promote sub-groups like CSACE and WSACE forming in regional centres for mutual benefit. Such small groups are the major contributors of articles for INSIDE INFO in fact the Vice-President of CSACE is the SYSOP and now Editor of A.C.E.(NSW). For the first two years of his membership he didn't attend any meeting or submit any articles to our newsletter. All positions on the committee of A.C.E.(NSW) is fully voluntary, without accolades.

A:LIBRARY

C:Can country members borrow overseas newsletters, magazines and books from the library?.....P.D.

R:Yes! All financial members can borrow magazines and books providing they agree in writing to return such items promptly and pay the return postage. They can do this by writing to the club's librarian at our postal address marked to the Attention of the Librarian.

More of your comments next edition.



A letter from Ireland
..ST..

I am writing to you as representative for the Atari User Group of Ireland.

Our user group is celebrating its first year in November. We now have about 65 members of which half are ST users. We have several SIGs, the most popular are C-Language and Games SIGs.

I am personally interested in Boat design but I have not found any good graphics software yet. I am also an electronic engineer, at this moment I am involved in designing a high res graphics board for the STs. Hopefully it will display 256 colours in 640x400 pixels. Same resolution as Atari ST monochrome. Also I intend to make an extension board for running PC boards on the STs, making it possible to use PC disk drives etc.

Some of our members are interested in radio ham data communication. If any of your members are interested then I will forward these messages on to him.

Many of our members are also looking for pen pals, if any of your members are interested then I will be glad to announce your names on our notice board.

We would also like to learn more about your country, your members computing interests and so forth.

We are looking forward to hearing from you.

Please write to me at the following address:
Gosta Strom,
President,
Atari User Group of Ireland,
100 Sillouge Avenue,
Ballymun, Dublin 11
Ireland

SOFTWARE

DISKETTES

\$15.00 - POLE POSITION

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A massive software library
for the price of a single
cassette...

HARDWARE

\$95.00 - 2 Atari Infra-red remote
control joysticks with
receive unit.

- * can be used with any Atari 8/16 bit computer..(plus others such as Commodore, Amstrad, etc, etc)
- * Sturdy construction, together with high precision control means they will outlast & outperform most other joysticks.
- * Long range... allows you to use them away from the computer even from the next room, or further!
- * Best of all no more messy tangled wires connecting up your joysticks with the computer console!

UPGRADE TO INVISIBLE WIRES
AND ENJOY FOR MANY YEARS THE
FREEDOM OF ATARI I.R. REMOTE CONTROL
JOYSTICKS !!!!

CONTACT PAUL PASIN

PHONE 066-29-3332

AFTER 6:30 PM

(LISMORE STD CODE)

OPEN LETTER TO ALL

DEAR ACE MEMBERS

Do you know of any tuner that can hook up to either of the Atari Monitors so that you can use it for TV? There is an add in Antic page 97 Dec 1986.

CMD have a NAP T.V. tuner, 82 channel broadcast reception, 12 channel Preset, with any composite colour monitor. This is NTSC, so it is useless for PAL.

Thankyou for any help you can offer

Sincerely
Doug Stone
St Ives

Ed:- hmmm. No I don't know of any at the moment. I have scanned all the UK and Australian journals. Perhaps, one of the members may have information that could assist in answering this.

Personally, I use my video recorder It is an old Sanyo VTC 9300 Beta system, and it has the necessary video and audio outputs (1980 vintage) To get the signal from composite PAL to R-B-G and sync, requires a sync separator and PAL decoder.

If one is available in Australia, ACE NSW would like to know about it, and possibly test drive it.

FOR SALE

=====

hardware

3 800XL with 1050 drives
monitor and TV cables
all documentation

your for \$399 a system

SOFTWARE

AVALON HILL GAMES at \$4.00

BOOKS

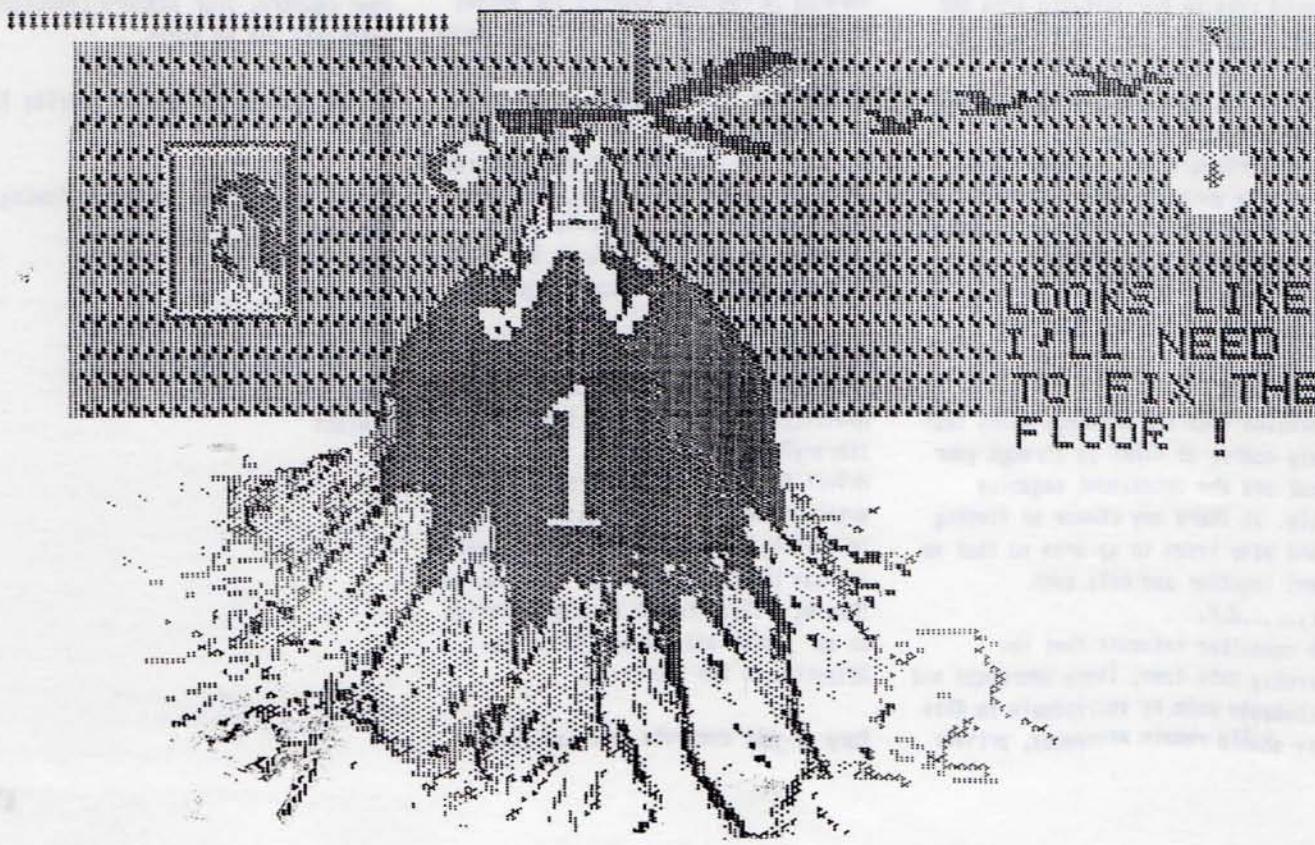
LOGO DOCUMENTATION

1 ref. manual
1 programming manual
The pair \$15.00
Or Near Offer

Anthony Stavrinou
phone number (02)- 939-7949



LOOKS LIKE
I'LL NEED
TO FIX THE
FLOOR !





UFO

UFO RESEARCH ON THE ST'

by ROBERT P. LANIGAN-O'KEEFFE

For many, many years, my forte has been in Astronomy. Since 1950 the new products such as plastics and fibre glass, and video. These excited me for I could see great potential in the new sciences.

Mastering the technology was one thing, but actually using it was another. In the early 70's my work in plastics research gave me the all clear to build the largest portable plastic telescope in the world, all 765mm in diameter. In 1972 I found a build-it-yourself name called "TELE-TENNIS", the very first home video game. I saw this as a guidance system for the monster telescope and built it.

The research into matters astronomical won me many accolades. The matter of extra-terrestrials was often brought up, in fact there are regular silly seasons, just as there is now. I had a standard answer to those who asked about little green men "just as we exist on this little planet, then there is a high probability that they exist elsewhere in the universe (it is so big)". "But", they would say, "what about all these UFO sightings".

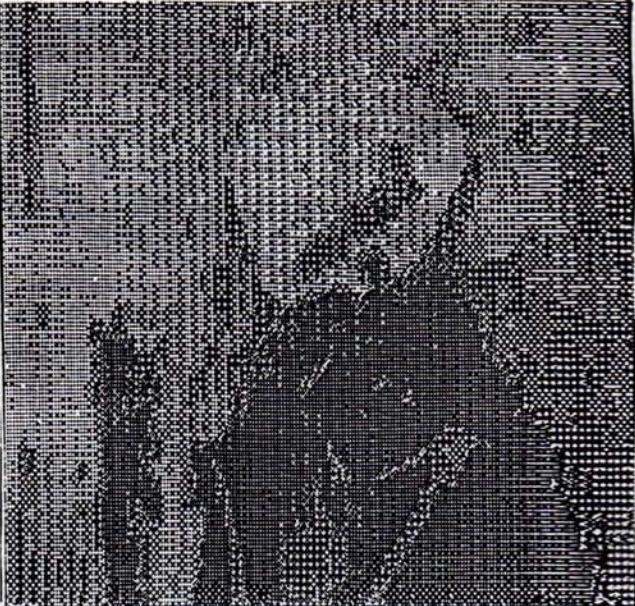
To any logical thinker, a UFO cannot be identified, for once it is identified, then it is no longer a UFO. A UFO is not defined and cannot be defined. The words "Unidentified" "Flying" and "object" have dictionary definitions, but when strung together in the term UFO do not mean "Aliens" or "extra-terrestrials". The word "alien" does not mean "creatures

from space". Rather it could refer to you when you go anywhere, for you are alien to the new environment. This may sound like an exercise in semantics, but all astronomers must be very careful and precise. There were some renegade astronomers who "cashed in" on the gullible public to be praised for their honesty in accepting this religion, to become the guru, guiding the misguided.

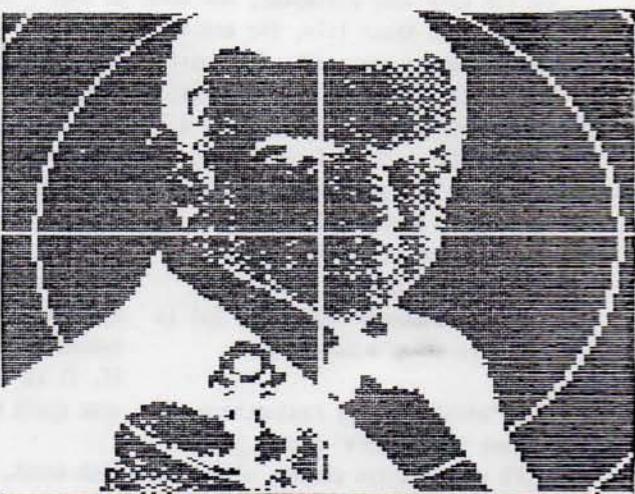
Do I sound like a skeptic? In 1979, a television reporter while on holidays in New Zealand, filmed what he said was a UFO. The story made the news internationally, and I made a video tape of the news story at the request of the Illawarra Astronomical Society. I found the evidence in that video to state that their object was in fact the planet Jupiter, its moons, and that it had been photographed on three separate dates, then photographically enhanced to look like something else. It had been specially animated and made to look unique. The story told by the reporter was based on poor logic, tautologies, inference and emotive garbage. "because all UFOs follow random UFO motion, therefore as this object is following random UFO motion, it must be a ufo".

I was sickened by the story. The astronomical society rang me and asked for a bit of research, as to assisting in identifying it. I told them that it appeared to be Jupiter and the next thing I was at WAR with the Television Network.

For the next four years I researched this Video tape, frame by frame, line by line. Their Video tape had been verified by the body NICAP in the USA as footage of the first Genuine UFO, and the network even



Here is one of the few obtainable photos of the alien. Distortion was caused by super-long telephoto lens.



**COVER
STORY**

~~CONFIDENTIAL~~

attempted to claim the \$10 million in cash and prizes offered by the US paper "THE NATIONAL ENQUIRER" for a genuine film of an identified unidentified flying object. LOGIC told me the paper would never part with \$1, let alone \$10 million. It is a great publicity stunt.

During this time, I had been harrassed and threatened by various members of

the network staff. I was not impressed and the more they attempted, the more I researched their film, the media, and the camera equipment. The loose link in the story was the body called NICAP, under the direction of Dr Allen Hynek. NICAP a US of A body where some was developed, or a ready made cash-in on UFO stories. It has no link with the US Government, and is a private body called the "National Investigatory Committee on Aerial Phenomena". Sounds impressive but is a wolf in sheep's clothing.

This "affiliation of researchers and eminent astronomers" proves to be a UFO verification centre, which fails to use the Scientific method in its experimentation and research.

So what does atari have to do with this subject?

In the summer of 1982, my research notes started to fill rooms, and my trusty old typewriter (nicknamed "clang bang scream") was nearing the end of its life. A friend of mine urged me to get a Word Processor, at around \$7,000. After looking at the then range; Apples need more cards and heaps of money; Vic was to small; Commodore to difficult; Atari was just right. At \$1300 the 800 entered the home and a love affair started which has turned into a marrage that took all my spare time. Atari's have kids too, other ataries, and the collection took up rooms. Notes and disks files

from one end of the house to the other.

The atari was smarter than the average computer, for it gave me a research tool, but it was limited in its capacity to digitize to the degree that I needed. In the 850 manual is a smart digitizer program

ST that I saw a tool that truely would suit my needs. But there was no digitizer available, and as the languages were pretty rough I had to wait till either a better language

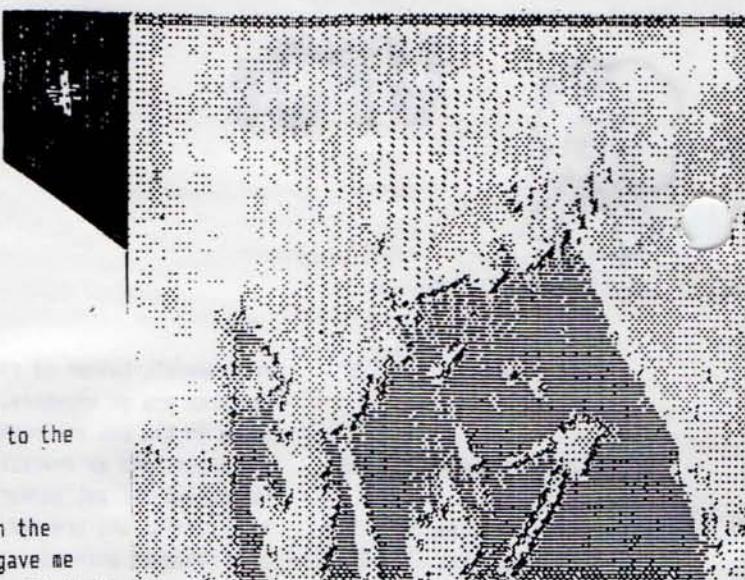
NICAP a US of A body where some was developed, or a ready made cash-in on UFO stories. It has no link digitizer became available.

Now both, there is DBASIC and many affordable digitizers. The REALIZER by Print Technik is a cartridge based system that plugs in the side of the ST. It is interesting and does allow some quick results.

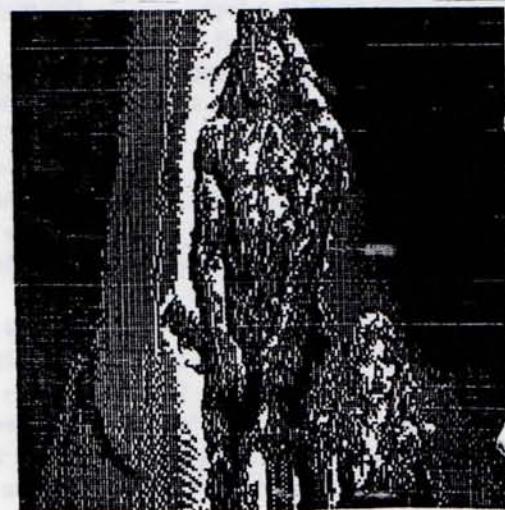
Each month, there are published so many books and magazines, telling of strange encounters, things that whirr and buzz in the night, visitors from far off planets. With so many sightings, it is a wonder where all these articles come from. What is the credibility rating? Is there any cause for alarm?

I believe there is, for many of these stories are works of fiction painted as truth and using the US freedom of press to deceive and act in a manner called deliberate fraud.

Lets start by digitizing one "ALIEN" photo. This is one of the verified stories of 1979, where the body of a mutilated alien was rushed to a US Naval Hospital. There are many tall stories claiming US cover-up and this does that as well. Mainly because the



Here is one of the few obtainable photos of the alien. Distortion was caused by super-long telephoto lens.



17⁸ BIT TYPE IN

S U P A T Y P A .



BY SIMON FERRETT

YES, IT'S HERE! What you've all been waiting for SUPA TYPY offers a range of features including:-

- * Easy data entry
- * Auto line numbering
- * Remaining memory
- * Line search
- * Previous line display
- * Disk directory
- * Re-load facility

"And friends, all this is yours for the amazingly low price of a few mega bucks!"

Seriously, this is a utility program that will give all the above and some more. But before you rush out and a/ type it in or b/ buy the disk from the software exchange,

A few instructions are necessary:-

Make two copies on Supa Typa, one in "SAVED" Format, and one in "Listed" format.

After typing in the program, save and list to disk/cassette. This means you can load and run it from scratch, or if you did not load it and you are half way through a program, you can still enter it in from the listed file.

To run from scratch, type run and enter. To run when half way through a program, or if you enter another listing Type GOTO 32600 and enter.

The data entry screen will appear. A few things to look for are:-

The ">" prompt. When ever this appears, you may type in a program line, a command or a command code.

The Command screen shows:-

- The available memory
- The auto line number status
- The quick find command code index
- The typo code indicator
- A Command index

To use SUPA TYPY if you are not in the AUTO or Data modes, just type in the line normally, press RETURN and the line will re-appear in the last line window (below the command index). The line's typo code will now be displayed instead of the two dashes, If the typo code in the book doesn't match what is on the screen, you have not typed the line in correctly as it was written (arrgh!). Press RETURN, and Edit the line.

HOW TO USE THE COMMAND CODES

1. DATA ENTRY key \ (shift +)
This allows quick and easy input of tedious data statements. To use, type "\\" and press RETURN. You will be asked "what line number?" Type in the line number and press RETURN. Now enter the data items, one by one, pressing the RETURN key after each entry. When you have finished the line, press Return without typing anything. Your complete line appears in the last line window, and its typo code in the typo indicator. If many lines of data are to be typed, set up AUTO mode. This saves entering the line number each time.

2. EXIT key @ (shift 8)
Type @ and press RETURN to end the SUPA TYPY program.

3. SAVE key = (shift =)
This lists to disk/tape your program without having SUPA TYPY tacked onto the end of it. To use, type ";" followed by dev:filename.ext and press Return.
(eg. :D:MYPROG.LST)

4. SEARCH key ^ (shift \$)
Makes the computer search for the next occupied line number. To use type ";" and press RETURN. The computer will respond with "searching, " and a jiggling cursor. After every 100 unoccupied lines, the computer asks if you want to abort or keep searching. If the computer finds a line, it will be displayed, ready to be edited.

5. CALL LINE key _ (shift -)
Allows you to call up any line for editing. To use, type "_" followed immediately by the line you wish to call. The line (if occupied) will appear, ready to be edited.

6. AUTO LINE command AUTO
Auto line numbering greatly speeds up the program entry. To use type "AUTO", followed immediately by the starting line number. Press RETURN and the prompt appears "STEP?" Type in the line increment and press RETURN. The starting line number appears, and you just type the line. Press RETURN and the next line number appears. Now, continue to type in lines normally without (obviously) typing the line numbers.

7. NAUTO command NAUTO
Line numbering OFF. This turns the auto function off. Just type "NAUTO" and press return.

8. ERASE key # (shift 3)
If you have not saved SUPA TYPY, then do so before using this command. It allows you to erase the SUPA TYPY from the end of your program. To use type "#" and press RETURN. You will have to confirm this dire act, and if you do, the computer will erase ONLY Supa Typa and return to BASIC. Please note,,, the variables used in Supa Typa will not be erased.

9. Directory key & (shift 6)
For those who have a disk drive, this is a necessary option to call up the disk directory.

10. ENTER key : (shift 1)
This is similar to the save command above. Here, you can re-call a file made by the SUPA TYPO "Save" command. Type ' followed by dev:filename.ext and press return such as
!D:MYPROG.BAS.

To find where you are up to in its input, or just to check a line number, the Search command and/or the Call command can be used.

To delete a line from your program, type in the line number you wish to delete, and hit RETURN.

The break key still works. To re-start SUPA TYPO if accidentally "STOPPED", type the following:

6.32605 and press RETURN

HAPPY TURING. eh TYPING!

Editor's reaction Coming into this position with zero utilities to do the job, and knowing how difficult it is to create a decent published Typo code, I rang Simon, and Craig

FOR OTHER EDITORS

Heading the listings is a file called PREPARE. This must be entered into any submitted BASIC file and run by the instruction GOTO 32010. If you wish, make line 32000 a rem and use Goto 32000 instead

This is a cut down version of Simon Ferret's program which generates the program title, the checksums, and prints the lot to disk in packets of 41 characters. The line starts with the checksum (2 characters, a blank, followed by the next Atari 38 column line. If the line is greater than 38 characters, the next packet starts off with 3 blanks, and so on until the line is fully saved.

WARNING WARNING. IF A LINE IS GREATER THAN 3 * 38 characters (3 lines) the line may be truncated. The Editor should then use basic to re-vamp the line.

A 10 BIT PRINTER DRIVER FOR EDITORS

As the new Editor, In almost 6 years of Atari ownership, I can honestly say that I have never bothered to print out any Atari listing in its Atari on

screen character set. I have used many typo checkers, like Simon's Supa Typo, and in some cases just given up, as the lines printed were just unreadable and too horrible to recognise any character especially control U, control M and underlines. Some magazines smudge, and others arrived in blur format.

Still I needed something that would Print the program created by my version of Simon's work "PREPARE". I felt the only way of doing it cleanly and neatly is as a full graphics dump of a total file, calling it from the disk.

I must point out that I am not happy with this rushed programme. It works as you can see from the listings. There are some other tricks which must be completed to make it a real go-er.

This 10 bit driver creates a character which is 10 pixels wide, not 8. Due to lack of time the program had to be a character editor and a driver. The font created can be saved to disk. In another edition I will throw in a few routines which will read the character set from disk and print the file that way. The program in part gives me those options now.

The program is configured in line 20 to drive the "STAR NX-10", where each line requires the graphics on command, and the modulus (the number of graphics pixels in expressed in two bytes.)

In the Compile Mode, 10 BIT DRIVER, as Prepare creates a 41 character listed line, this is pulled in as packets of lines and sub lines. The program starts by determining each line length.

String=41 characters.
therefore Length=410
Modulus= INT(410/256), 410-INT(410/256)

About the program. If you are contemplating typing it in, there are 2,560 control character in the data. The fastest way is to enter all lines up to line 2001 ONLY. Use Turbo Basic At this point save and run the program. Now, Use your joystick and create the character set using the copy command.

The print out is in 80 column format, so it will require being shrunk in a photocopier by 70%. The definition fails at 40%. This is where I am not happy as photocopies glug up and make the final product a bit yucky. I will keep you informed as to the changes.

LARRY

DISK/FILE INVENTORY

by

Merrick Nacinovich

This little program was intended to solve a problem of my own making. That is, shuffling or copying programs from one disk to another, and ending up with the same ones on many disks. I needed something simple that read the directories of all disks, then sorted them quickly so I could identify the duplications and disk location. It also should identify vacant disk space.

I have no doubt there are many such utilities around if I had the time to look for them. Unfortunately those I did find had so many bells and whistles on them, they would take hours to sort a few hundred files. As usual, the answer is write it yourself and learn

The number of records it can read is determined by your available memory. I have an 800XL which trial and error indicates about 1050. Alter variable MAXREC in line 40 to suit your own needs. I also opted to leave out DOS SYS, DUP SYS etc. (lines 150-180), however, should you want these little gems of information I suggest changing GOSUB 150 to 190 in line 110.

The program will only ask you for a date (in the platonic sense), and a reference # for each disk read. You can then sort the lot by record and/or by disk reference. The most time consuming aspect is waiting for the disk drive to stop before inserting and reading the next disk. Sorting a full 1100 records takes about 20-30 seconds.

I suggest if you run this program using Turbo-Basic, have a tinker with the for/next delay loops in lines 590 and 610. Unless you have high speed vision, try changing 1000 to 5000.

EDITORS NOTATION:-

The problems I noted with this program were:- 1. Does not like it if no printer connected

2. For a few more than 1100 records, the printer must not do a form feed at the end of the document. My suggestion is to change the CHR\$ in lines 470 and 490 to CHR\$(13) which is standard ASCII line feed.

```

; to top left hand corner
Temp = $51 % Video ;toggle display
POKE (Window,Temp) ;Top LH corner

ACROSS (Video,Width,Window)
; Top Border Line

Temp = $45 % Video
POKE (Window+X_Size-1,Temp)
; Top RH

Window = Window+40
Temp = $7C % Video
; Sides
DO ; border sides
  POKE (Window,Temp)
  POKE (Window+X_Size-1,Temp)
  Window+=40
  Length=-1
UNTIL (Length=0)
DO

Temp = $5A % Video
POKE (Window,Temp)
;bottom LH Corner

Across(Video,Width,Window)
;bottom side

Temp= $43 % Video
POKE (Window+X_Size-1,Temp)

RETURN
;-----

BYTE FUNC W_Open (BYTE X_Pos,Y_Pos,
                  X_Size,Y_Size,
                  BFlag,Fill,
                  Number)
;Opens a new window
;saving existing screen data onto a
; stack

BYTE Temp,FlyBack,Video,X_Counter,
      Y_Counter, Width, Length,
      Blank,
      B_Video
CARD Border_Start

X_Counter=X_Size
Y_Counter = Y_Size
Video = Fill & $80
;mask off high bit
Blank = $00 % Video

;calculate the window address
Window = SavMsc + Y_Pos*40 + X_Pos
Border_Start = Window

; calculate Flyback
FlyBack = 40-X_Size

;Test for first window
IF (Number = 0)THEN
  ; initialize working stack
  Stack = 1 + Stash_Stack
FI

Number==+1
;save the data under the proposed
; window area
DO
  DO
    Temp = Peek(Window)
    POKE (Stack ,Temp)
    POKE (Window,Blank)
    ; blanks the spot
    Window+=1
    Stack+=1
    X_Counter == -1
    UNTIL (X_Counter=0)
    DO
      Y_Counter=-1
      Window+=FlyBack
      X_Counter = X_Size
    UNTIL (Y_Counter=0)
    DO
      ;Save the parameters
      Window=-FlyBack
      POKE (Stack,Window)
      Stack+=2
      POKE (Stack ,FlyBack)
      Stack+=1
      POKE (Stack ,Y_Size)
      Stack+=1
      POKE (Stack ,X_Size)
      Stack+=1
      ;draw a border
      IF (Bflag>0)THEN
        B_Video=Video
        IF(Bflag=128)THEN
          B_Video=Video+128
        FI
        Border(Border_Start,X_Size,Y_Size
               ,B_Video)
      FI
      RETURN (Number)
;-----

BYTE FUNC W_Close (BYTE Number)
; close the last window
BYTE X_Size,Y_Size,X_Counter,
      Y_Counter
BYTE FlyBack,Temp

IF (Number=0)THEN
  ; no windows
  RETURN (Number)
FI

Number==1
;Get the information on what was
;under this window
IF(Stack>Stack_Size+Stash_Stack ) THEN
  Position (2,15)
  PrintDe (Stack)
  PrintDe (Stack_Size)
  BREAK()
FI

Stack=-1
X_Size = Peek (Stack)
X_Counter = X_Size
Stack=-1
Y_Size = Peek (Stack)
Y_Counter=Y_Size
Stack=-1
FlyBack = Peek (Stack)
Stack=-2
Window = PeekC (Stack)

; Replace with what was under the
; window

DO
  DO
    STACK=-1
    Temp = Peek (Stack)
    Window=-1
    Poke (Window,Temp)
    X_Counter=-1
    UNTIL (X_Counter=0)
    DO
      X_Counter = X_Size
      Window=-FlyBack
      Y_Counter=-1
    UNTIL (Y_Counter=0)
    DO
      RETURN (Number)
;-----

PROC W_PrintT (BYTE X_Pos0,Y_Pos0
                 ,X_Inc,Y_Inc
                 BYTE ARRAY Text)
;to print a text line in current
; window
; VeryMickeyMouse at present
; to be extended in capability

Position
  (X_Pos0+X_Inc,Y_Pos0+Y_Inc)
Print (Text)
Position (0,0)
RETURN
;-----


And the Demo Program

```

```

;-----;
;Demonstration of M Windows features
;-----;

INCLUDE "D1:MWINDOWS.ACT"

PROC Delay (INT Count)
INT i,J
FOR i = 1 TO Count
DO
  FOR J=1 TO 50
  DO
  DO
  RETURN
; . .
PROC Windows_Demo()

BYTE ARRAY Text
BYTE Px,Py,Sx,Sy,Border,i,x,y,z
BYTE Number = [0], Fill
Card Pause = [200]

POKE (752,1)
Fill=Peek(710):Poke(712,Fill)

FOR i = 1 TO 20
DO
PrintE("ACTION DEMO")
DO
DELAY (3#Pause)

;Title
Px=2:Py=1:Sx=36:Sy=5:Border=1
Fill=128
Number=W_Open
  (Px,Py,Sx,Sy,Border,Fill,Number)

Text="M-WINDOWS VERSION 1:1"
W_PrintT (Px,Py,8,2,Text)
Delay (5#Pause)

Px=2:Py=7:Sx=36:Sy=12:Border=1
Fill=128
Number=W_Open
  (Px,Py,Sx,Sy,Border,Fill,Number)
Text = "Features:"
W_PrintT(Px,Py,13,1,Text)
Text = "-----"
W_PrintT(Px,Py,13,2,Text)

;Features

FOR X=3 TO 5
DO
  IF (X=3) THEN
    Text = "..All ACTION Code"
  ELSEIF (x=4) THEN
    Text = "..Modify to suit Needs"
  ELSE
    Text =
"Up to 255 Windows open at once"
  FI
  W_PrintT(Px,Py,3,x,Text)
  Delay(Pause)
OD

;Various sizes
Text =
"-Windows can be various sizes"
W_PrintT(Px,Py,3,6,Text)

Delay (Pause)
FOR x= 3 to 7
DO
  Px=x-2:Py=10+x:Sx=x:Sy=5:Border=0
  Number =W_Open
    (Px,Py,Sx,Sy,Border,Fill,Number)
  Delay (3#Pause)

  Px = 42-x-x
  Number =W_Open
    (Px,Py,Sx,Sy,Border,Fill,Number)
  Delay (3#Pause)

  DO
    FOR x= 3 to 7
    DO
      Number=W_Close(Number)
      Number=W_Close(Number)
    DO
      Delay (3#Pause)

      ; Multi colour
      Px=2:py=7
      Text=
        "-Windows can be multi_colour"
      W_PrintT(Px,Py,3,7,Text)
      Delay (3#Pause)
      Fill=0:Px=6:Py=16:Sx=9:Sy=5
      Border=1
      Number=W_Open
        (Px,Py,Sx,Sy,Border,Fill,Number)
      Text="Black"
      W_PrintT(Px,Py,2,2,Text)
      Delay (3#Pause)

      Fill=128:Px=25:Border=128
      Number=W_Open
        (Px,Py,Sx,Sy,Border,Fill,Number)
      Text="White"
      W_PrintT(Px,Py,2,2,Text)
      Delay(3#Pause)

      Number=W_Close(Number)
      Number=W_Close(Number)
      ;DELAY (100#PAUSE)
      ;use to locate Glitch Number #1
      ;BREAK()

      ;Borders
      Px=2:Py=7
      Text="Borders are Optional"
      W_PrintT(Px,Py,3,8,Text)
      Delay(5#Pause)

Px=2:Py=20:Sx=36:Sy=3:Border=0
Number=W_Open
  (Px,Py,Sx,Sy,Border,Fill,Number)
Text="Window without any border"
W_PrintT(Px,Py,5,1,Text)
Delay(5#Pause)

Border=1
Number=W_Open
  (Px,Py,Sx,Sy,Border,Fill,Number)
Text="Window with normal border"
W_PrintT(Px,Py,5,1,Text)
Delay(5#Pause)

Border=128
Number=W_Open
  (Px,Py,Sx,Sy,Border,Fill,Number)
Text="Window with reverse Border"
W_PrintT(Px,Py,5,1,Text)
Delay(5#Pause)

Number=W_Close(Number)
Delay(2#Pause)
Number=W_Close(Number)
Delay(2#Pause)
Number=W_Close(Number)
;Delay (100#Pause)
;Insert to locate 2nd Glitch
;Break ()

;Pull Down Menu

Px=2:py=7
Text=" Pull down menus"
W_PrintT(Px,Py,3,9,Text)
Delay (5#Pause)

FOR z=2 TO 36 Step 9
DO
  Sx=9:Sy=1:Border=0
  FOR y=19 TO 23
  DO
    Px=z:Py=y
    Number=W_Open
      (Px,Py,Sx,Sy,Border,Fill,Number)
    Delay(Pause)
  OD
  Position(Px,21)
  Text="Pull_Down"
  W_PrintT(Px,21,0,0,Text)
  IF(Z=2)THEN
    Text="-----1"
  ELSEIF(z=11)THEN
    Text="-----2"
  ELSEIF(z=20)THEN
    Text="-----3"
  ELSEIF(z=29)THEN
    Text="-----4"
  FI
  W_PrintT(Px,22,0,0,Text)
  Delay(5#Pause)

  FOR x=19 TO 23
  DO
    Number=W_Close(Number)

```

Delay (Pause)

0D

;close all Windows
Number=W_Close(Number)
Delay(5#Pause)
Number=W_Close(Number)
Number=W_Close(Number)

;
RETURN

Now that wasn't hard was it ??
I have a couple more such
translations in the pipeline, that I
hope to share with you next issue.

Cheers . Brian Elliott

Craig expresses his apologies, but
pressure at the university, has forced
him to relinquish the position as
Editor. We thank Craig for his work
over the past couple of years, and wish
every success.

=====

SUBMISSIONS TO INSIDE INFO THE EDITOR .

There are many ways of submitting
articles and programs to INSIDE INFO;
be it on paper, on tape, on floppy, by
modem or by mail, in person.

All originals will be returned, whether
accepted or not. Copies will be kept by
ACE NSW of all documents and files. The
reason for any rejection will be
stated. It could also be that after
some rework, the program may be
released. The author will be notified
of such changes and improvements. Some
programs submitted may not be published
but will appear on the Inside Info disk
in the Software exchange as "bonus"
public domain software or freeware.

I find it odd to see the high quality
programs and text submitted on
different mediums, such as a tape or
disk with the accompanying article as
a printout or a handwritten scrawl.
This is obviously inefficient as the
article needs to be re-typed and in
some cases translated

Yes, translated. Handwriting varies and
this causes many translation errors.
Some words require cryptography skills
and many guesses. I kid you not, but I
prefer to send my articles by
electronic means, as text files. There
are three reasons for this:-

1. It is instantly readable.
2. There is no third party
translation, for what I wrote is not
subjected to someone else typing it
in. Often they put in different
words to what I wrote. Sometimes a
deliberate spelling error may add
far more impact to a boring
narrative if used correctly
3. It saves time in the compiling and
editing of Inside Info.

Some may see my handwriting and say
that is the reason. Still I am not the
only one confused by the handwriting of
others. You may see the same
handwriting and read it differently.
Common letters like "K" become "IC",
number "5" becomes "S"; "H" often
turns into "II", "A", "4", "14", "M", "W"
and "Id". Have you experienced
difficulty in reading a handwritten
letter? At the bottom that person's
printed name to the signature

I am not knocking handwriting, but if
anyone wants an article published
faster, the best way is to send both
the file and the article on disk/ tape/
or printout, with a covering letter
which the secretary can
translate.

HOW AN ARTICLE SHOULD BE WRITTEN

When you prepare an article, remember
to check your spelling. Some people get
quite upset and decry poor spellers.
Often these people forget that some of
the most brilliant people made up for
their inability to spell correctly,
like Einstein, J F. Kennedy, and Newton.

Others forget that our language is a
living language; always evolving. A
simple sentence can have many meanings
depending on how it is used and how the
paragraph is built up. Short sentences
have more impact than the long, boring
sentence. English is not a phonetic
language, so it is difficult to put
intonation and accent into the written
word. Punctuation, is therefore, very
important as it makes the reader take
notice!

However, this does not give you the
licence to corrupt the English
language, for a spelling mistake can
change the entire meaning of what you
are trying to tell others. It can
change history "Drake said, 'the Amara
can wait but my bowels cannot'"
(bowls)

The real aim in writing is to tell
someone about something. An author must
express thoughts, instructions, and
concepts on paper. This must be clear
and distinct, so that your meaning is
not lost. The best thing to do is to
draw a rough plan in point form, and
then build upon that plan.

It may be an idea to get a friend to
read the article out loud and listen to
it. This may be too cruel and may
discourage the author. I usually put
the article down and leave it for a few
days before reading it again. In the
mean time I see things I forgot. On
reading the document I cringe in horror
and cross out big chunks.

Eventually, when it's all ready, then I
tidy it up and present a clean
submission, on disk or tape.

SUBMISSIONS ON TAPE:-

Tape is subject to some mechanical
problems, (such as sticking, steps, ~~hump~~
and flutter, stretching, crimps). There
are other electro-magnetic effects
(drop-outs, levels, print-through) and
chemical problems (fingerprints and fly
spray) that can also add to tape
reliability problems. This is not a
rotten medium, rather, with the correct
attention to detail there should be few
problems encountered. Then the only
problem to the editor is to match the
head alignment or azimuth.

1. Before recording anything,
choose a reasonable quality C60 tape.
2. Fast forward the tape to the
end and then rewind to the start.
3. Type LP. before loading or
saving a program.
4. Record everything twice. For
programs, first record using "CSAVE"
then in the second record using
"LISTC:"
5. Text files should be
recorded twice, as it is possible that
one copy may not load. COMPUTE's
SPEEDSCRIPT supports cassette save and
load.

6. Fast forward the tape to the
END

7. On the other Side of the tape, make at least TWO copies of the program. One in "SAVED" format and the other in "LISTED" format. This is purely as a guarantee that the old 410 or 1010 can read it.

8. Fast forward the tape to the end and remove it.

9. Please label the tape correctly stating your name; the side number; the programs and file names and the type of save; and whether a 410, 1010 or whatever recorded it.

EXAMPLE SIDE 1.. J BROWN 1010
ASCII.PRG CLOAD
ASCII.PRG ENTER"C:"

SIDE 2.
ASCII TXT SPEEDSCRIPT
ASCII TXT SPEEDSCRIPT

DON'T USE a tape that you have had in your "Walkman" for the past 6 months, or one previously used for music or work.

NOW WHAT ABOUT DISKS???

Disks are easily transported, mailed and inexpensive. They have obvious advantages and we have the technology to read all Atari formats. The ST can read single and double density as well as dual "A" side disks (hardware mod).

The 800 can read single, enhanced and double density. There are 4 points to note on the disk label:-

1. The DOS format used
2. The density.
3. The programming language.
4. The names of the various files and programs.

EXAMPLE:- DOS 2.5 Enhanced

Turbo Basic
1. ASCII.TXT
2. MYPROG.TUR
3. PROG.RSC

CONCLUSION:-

Any assistance like this will be greatly appreciated. Obviously, it will be faster to process your work, do what-ever editing, and establish it in the type-setter.

From the responses to "THE SURVEY" many decry the period of time between INSIDE INFO publication. But put yourself in the position of the editor, manually

typing in many articles... get my drift... The harder it is for the editor (1 person) to get the act together, the longer the delay in getting INSIDE INFO together. Lets end this catch-22 and mutually assist each other. Remember that we are all unpaid, and what limited free time we have is put into INSIDE INFO.

If you have a modem, then send your file to the remote access computer system (the BBS) and leave a message at log-off to the sysop.

The bottom line is found in a majority of your comments. The survey reports have been carefully studied. Even the comment "never been to a meeting" has been noted. It is obvious that the three important services provided by ACE to country members are:-

INSIDE INFO
THE SOFTWARE EXCHANGE
THE LIBRARY
THE BBS

Time to get down on my knees. you too have a story to tell. Have you got any ideas on more improvements. Why not use your computer and send in a review, a story, a comic, a game, or some adventure tips. YOU are the expert, and even experts need help too, so why not put any computing problems to all the other experts. Similarly, why not help others, share what you have learnt from your experiences

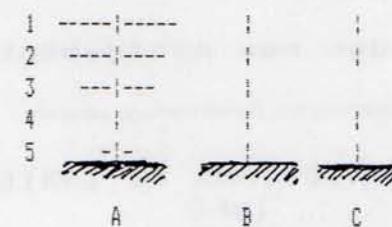
DON'T JUST SIT ON YOUR SUBMISSION
SEND IT!

TOWERS OF HANOI

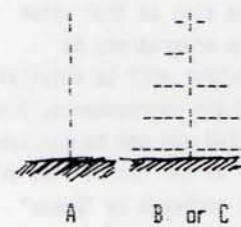
by Rikki Harris

This game, in the non computer form, was taught to me by my father who was taught by his father. Despite its popularity in my family, I could not find, in my (American) encyclopedia, any mention of the Towers of Hanoi, let alone its origins, so there go all my plans of telling you about the game's origins.

At the start of the game there are three pegs (I've called them A, B, and C). Peg A has 5 disks (No, not from your disk-drive), of progressively smaller size, in a pile.



The aim is to get all the disks from peg A to peg B (or peg C if you prefer) by lifting them from peg to peg. They must be arranged so that the largest disk is on the bottom and the smallest at the top. You can only move one at a time and at all times there must be no disk sitting on another disk of smaller size.



It is a mathematical impossibility for anyone, including the almighty ATARI to complete the Towers of Hanoi with 5 disks in fewer than 31 moves.

The book "Computer Science LOGO"

style", by Brian Harvey, contained a recursive LOGO procedure called HANOI which went through the moves that would be required to complete the puzzle. As a project in our year 11 computer science class last year, Jeanette Abbott and I wrote a program that would show these moves on screen with LOGO graphics. Expansions gave us a game that could be played by a human.

To play this game type in the listing, save it, and type 'TOWERS.OF.HANOI'. If you can't do it in 31 moves then you can let the computer show you how by typing 'COMPUTER.PLAY'. If this is too fast for you to follow you can extend the WAIT in COMPUTER.MOVEDISK.

This program shows some interesting features of LOGO that are relatively undocumented. The first, and probably the most important is RECURSION, shown in the procedure COMPUTER.HANOI. The principle behind recursion is that a procedure calls itself with different inputs repeatedly to complete a task that has many steps that are essentially the same, apart from one small difference. The COMPUTER.HANOI procedure, the only one written by Brian Harvey and not Jeanette or myself, is a quite complicated example best left alone unless you are studying recursion, but a favourite procedure of my own computer teacher was the DOWNUP procedure:

```
TO DOWNUP :WORD
PR :WORD
IF EQUALP LENGTH :WORD 1 [STOP]
DOWNUP BL :WORD
PR :WORD
END
```

(This procedure was written by Brian Harvey in his book, as well)

```
DOWNUP "HELLO
HELLO
HELL
HEL
HE
H
HE
HEL
HELL
HELLO
```

The line:

```
IF EQUALP LENGTH :WORD 1 [STOP]
```

is called the stop line and stops the recursion when there is only one letter left in the word and starts the program on the 'UP' part.

The secret of recursion is that there are many different copies of DOWNUP recognised by the computer, each in a different level. The first version in this example prints 'HELLO', and calls the second version of DOWNUP which prints 'HELL' (BL of HELLO) and then calls the third version, and so on. When 'H' is reached, the STOP command is executed and control is passed to the next highest copy of DOWNUP which prints 'HE' the second time (the second 'PRINT :WORD' in the procedure). This continues until the control is passed back to the original DOWNUP which prints the final 'HELLO'

Recursion can be used for many other applications but is most commonly used for word and list manipulation.

The other interesting technique used in the Towers of Hanoi is a string array of sorts. LOGO has a nearly unique ability amongst high level languages to use variable names that can be created within the program itself. The variables NEXT1, NEXT2, and NEXT3 are accessed using the statement 'THING WORD "NEXT :NUMBER'. If :NUMBER is 2, then this line would output 'NEXT2' and if :NUMBER was 3 it would output 'NEXT3'. This means that one routine can do what would normally require 3 routines to handle the three variables (or even more for larger arrays). It may make the program less readable, but it is more than made up for in the extra programming power given to you with this technique.

The book "Computer Science LOGO style. Volume 1: Intermediate Programming" by Brian Harvey was published by MIT press and was originally bought at McGill's Newsagency, Elizabeth St. Melbourne.

```
*****  
TO TOWERS.OF.HANOI
HUMAN.PLAY
END
```

```
TO INSTRUCTIONS
SETBG 75
TS
CT SETCURSOR [0 0]
```

```
PR [THE AIM OF THE GAME IS TO MOVE ALL]
PR [FIVE DISKS FROM PEG A TO PEG B, ONE]
PR [AT A TIME.]
```

```
PR []
PR [TO DO THIS YOU MUST FIRST ENTER THE]
PR [LETTER OF THE PEG YOU WISH TO TAKE]
PR [THE DISK FROM AND THEN THE LETTER OF]
PR [THE PEG YOU WISH TO PUT THE DISK ON.]
PR []
PR [YOU MUST NOT PUT ANY DISK ON TOP OF A]
PR [SMALLER DISK.]
PR []
PR [THE RECORD IS 31 MOVES, GOOD LUCK]
PR []
PR [PRESS ANY KEY TO PLAY]
PR RC
SETCURSOR [0 20]
END
```

```
TO GAME
SETBG 0
SETPC 0 58
SETPC 1 25
HT
CS
SETPN 0
PEGS
MAKE "NEXT1 5
MAKE "NEXT2 0
MAKE "NEXT3 0
SETPN 1
DISK 1 5 1
DISK 1 4 2
DISK 1 3 3
DISK 1 2 4
DISK 1 1 5
END
```

```
TO PEGS
PEG1
PEG2
PEG3
END
```

```
TO PEG1
PU SETPOS [-120 -30] PD
SETPOS [-60 -30]
PU SETPOS [-90 -30] PD
SETPOS [-90 50]
PU SETPOS [-95 -50] PD
SETPOS [-95 -40]
SETPOS [-85 -40]
SETPOS [-85 -50]
PU SETPOS [-85 -45] PD
SETPOS [-95 -45]
END
```

```
TO PEG2
PU SETPOS [-30 -30] PD
SETPOS [30 -30]
PU SETPOS [0 -30] PD
SETPOS [0 50]
PU SETPOS [5 -45] PD
SETPOS [-5 -45]
```

```
SETPOS [-5 -40]
SETPOS [5 -40]
SETPOS [5 -50]
SETPOS [-5 -50]
SETPOS [-5 -40]
END
```

```
TO PEG3
PU SETPOS [60 -30] PD
SETPOS [120 -30]
PU SETPOS [90 -30] PD
SETPOS [90 50]
PU SETPOS [95 -50] PD
SETPOS [85 -50]
SETPOS [85 -40]
SETPOS [95 -40]
END
```

```
TO HUMAN.HANOI
PR [CENTER PEG TO TAKE DISK FROM]
MAKE "FROM FIRST RC PR :FROM
IF OR ( ASCII :FROM ) < 65 ( ASCII :FROM ) > 67 [TYPE CHAR 254
HUMAN.HANOI]
PR [CENTER PEG TO PUT DISK ON]
MAKE "TO FIRST RC PR :TO
IF OR ( ASCII :TO ) < 65 ( ASCII :TO ) > 67 [TYPE CHAR 254
HUMAN.HANOI]
IF EMPTYP THING WORD "PEG ( ASCII :FROM ) - 64 [NOT.THERE]
MAKE "NUMBER LAST THING WORD "PEG ( ASCII :FROM ) - 64
HUMAN.MOVEDISK :NUMBER ( ASCII :FROM ) - 64 ( ASCII :TO ) - 64
HUMAN.HANOI
END
```

```
TO HUMAN MOVEDISK :NUMBER :FROM :TO
CHECK
RUB.OUT :FROM :NUMBER THING WORD "NEXT :FROM
MAKE WORD "NEXT :FROM ( THING WORD "NEXT :FROM ) - 1
MAKE WORD "NEXT :TO ( THING WORD "NEXT :TO ) + 1
DISK :TO :NUMBER THING WORD "NEXT :TO
END
```

```
TO CHECK
IF NOT EMPTYP THING WORD "PEG :TO [IF ( LAST THING WORD "PEG :TO ) < ( LAST THING WORD "PEG :FROM ) [ILLEGAL.MOVE]]
MAKE "MOVES :MOVES + 1
MAKE WORD "PEG :FROM BL THING WORD "PEG :FROM
MAKE WORD "PEG :TO SE THING WORD "PEG :TO :NUMBER
IF EQUALP :PEG2 [5 4 3 2 1] [FINISH]
IF EQUALP :PEG3 [5 4 3 2 1] [FINISH]
END
```

```
TO RUB.OUT PEG NUMBER POS
PU
SETPOS LIST ( ( :NUMBER * -2 ) - 10 ) + ( 90 * ( :PEG - 2 ) ) ( ( :POS
* 10 ) - 30 )
PE SETH 90
FD ( ( :NUMBER * 4 ) + 20 ) / 2
PD SETPN 0 FD 1
PU FD 1
PE
FD ( ( :NUMBER * 4 ) + 20 ) / 2
PU HOME
END
```

```
TO DISK :PEG :NUMBER :POS
PU HT
SETPN 1
SETPOS LIST ( ( :NUMBER * -2 ) - 10 ) + ( 90 * ( :PEG - 2 ) ) ( ( :POS
* 10 ) - 30 )
PD SETH 90
FD ( ( :NUMBER * 4 ) + 20
PU HOME
END
```

```
TO NOT.THERE
PR [ SE [THERE IS NO DISK ON PEG] :FROM [TO TAKE] ]
PR RC
HUMAN.HANOI
END
```

```
TO ILLEGAL.MOVE
PR [YOU CANNOT PUT A DISK ON TOP OF A]
PR [LARGER DISK]
PR RC
HUMAN.HANOI
END
```

```
TO FINISH
RUB.OUT :FROM :NUMBER THING WORD "NEXT :FROM
MAKE WORD "NEXT :FROM ( THING WORD "NEXT :FROM ) - 1
MAKE WORD "NEXT :TO ( THING WORD "NEXT :TO ) + 1
DISK :TO :NUMBER THING WORD "NEXT :TO
CT
PR [CONGRATULATIONS, YOU FINISHED THE]
PR [ SE [TOWERS OF HANOI IN] :MOVES [MOVES.] ]
IF EQUALP :MOVES 31 [PR [A PERFECT SCORE]]
IF :MOVES < 31 [PR [YOU ARE A CHEAT]]
IF :MOVES > 31 [PR [TRY AGAIN]]
PR [PRESS ANY KEY TO PLAY AGAIN]
PR RC
HUMAN.PLAY
END
```

```
TO COMPUTER.PLAY
FS CS
GAME
```

```
COMPUTER.HANOI 5 1 2 3
ES
SETCURSOR [0 20]
PR [DO YOU WANT TO SEE IT AGAIN?]
IF EQUALP RC "Y [COMPUTER.PLAY]
END
```

```
TO COMPUTER.HANOI :NUMBER :FROM :TO :OTHER
IF EQUALP :NUMBER 0 [STOP]
COMPUTER.HANOI :NUMBER - 1 :FROM :OTHER :TO
COMPUTER.MOVEDISK :NUMBER :FROM :TO
COMPUTER.HANOI :NUMBER - 1 :OTHER :TO :FROM
END
```

```
TO COMPUTER.MOVEDISK :NUMBER :FROM :TO
WAIT 10
RUB.OUT :FROM :NUMBER THING WORD "NEXT :FROM
MAKE WORD "NEXT :FROM ( THING WORD "NEXT :FROM ) -
MAKE WORD "NEXT :TO ( THING WORD "NEXT :TO ) + 1
DISK :TO :NUMBER THING WORD "NEXT :TO
END
```

SPECIAL NOTICE

EDITORIAL FOR NUMBER 33

COSTS OF INSIDE INFO

TO THE CLUB, INSIDE INFO IS A COSTLY BY NECESSARY FUNDAMENTAL EXPENSE. THERE HAVE BEEN MANY COMMENTS MADE THE SURVEYS REGARDING WHERE THE THE CLUB'S MONIES GO... PRINTING IS AN EXPENSIVE PAST-TIME.

Lets look at the costs of the past four issues. We are looking at the bottom lines.

..POSTAGE..

vol	printing	Aust.	0/S	total
28	876.00	52.20	55.30	989.50
29	821.70	112.17	18.35	952.22
30	642.87	60.60	52.25	775.72
31	1272.11	79.27	53.95	1405.33

The club's financial position in August 1987 showed a balance of 3,567.86. This does not bear interest as it sits in a cheque account. The situation is being rectified.

Current cost predictions for the Inside Info, could blow the entire club's monies within 20 months. Some will say "pull those purse strings closed". I do not agree with this philosophy. One must gamble and provide a better journal than the rest. One must encourage others to get involved, not just to wave the flag, but for the benefit of all. They need to join to write articles, to address problems and give others the support.

Inside Info this edition was planned to be 2 separate mags, one for the ST and one for the 8 bit. However time was against us, and the fellows with their STs could not get their act together in time, so the Committee decided that Issues 32 and 33 should be amalgamated to get the Christmas issue together, since compilation is a long and difficult job. This will give the editor time to get the edition together.

Subsequently,,,

At the AGM, I wish to propose the following motion.

STATEMENT OF MOTION

I hereby move that;

The position of Editor as defined in the Constitution be abandoned,

and that an editorial committee be established. This committee of 5 members must consist of two 8 bit and two 16 bit users minimum. The chairman of this committee must have both 8 and 16 bit machines, and will be called the editor. The Editor or a nominated editorial committee member is to attend ACE (NSW) committee meetings. They will establish and use a communication network for the fast and efficient input of articles and assist in the compilation and distribution of Inside Info, in a manner which the members of ACE NSW require. Other members of this committee will be deemed Sub-Editors. Their duties responsibilities will be validated by the committee of ACE (NSW).

It is now October, and I have had to take my holidays to compile INSIDE INFO. Hence my motion.



TO THE SECRETARY,

I have pleasure in submitting the following proposals of motion that I would like to see incorporated in the Constitution of our club. Not having seen the club's Constitution I presume that any changes to the same would need to take place at the Annual General Meeting, where voting by all financial members present would either carry or defeat each motion presented.

PROPOSALS OF MOTION

hereby move that;

Position of Equipment Officer be created, and the person elected, to keep a record of all equipment belonging to Atari Computer Enthusiasts (NSW). Also that a record book be maintained with full details pertaining to each item of equipment and details of which member has booked out that piece of equipment. Also that a list, of all equipment be published in the December issue of Inside Info.

I hereby move that;

The Treasurer submits an end of year Financial Statement, to be made available for the Annual General Meeting. The said Statement to be a full and complete set of details relating to and including all income and expenditure for the full year, and that the said statement be published in the December issue of Inside Info.

The reason I have decided to move these two motions is as follows, I believe that a club the size of ACE (NSW) and with the amount of hardware and software owned by the club, and therefore by the members of the club, that it becomes necessary to itemise, record and publish a list of all items of equipment so as all members of the club know what they, the club owns.

Having noted the Treasurer's Report, in December '86 issue of Inside Info, I found it only told me that, and I quote, "we are raising the yearly membership to \$20."

This was the total Treasurer's report for 1986. Considering that the club has membership in excess of two hundred, and for most the only contact with the club is their issue of Inside Info, I think it is only fair that they are given a full report of how their money has been handled over the year.

Considering that for most members, which are those who cannot attend regular club meetings, the only contact that they have with the club is their issue of Inside Info might it not be useful to publish the club's Constitution.

Well can't think of anything more at the moment, lets keep Atari strong and alive in the land of Oz.

LANCE MUNDAY
(047) - 33-3878

MOTIONS VERIFIED AND ACCEPTED BY THE COMMITTEE. ACTION ON TREASURER. ACTION ON EDITOR TO PUBLISH LETTER AND MOTIONS. ACTION ON LIBRARIAN FOR COPY OF THE CONSTITUTION. ACTION ON EDITOR TO PUBLISH CONSTITUTION IN DECEMBER 1987 INSIDE INFO.

MEETBEAT
by Ian Murray

Welcome to this issue of MEETBEAT, and the news that MOBEX and ATARI CORP have joined forces to market ATARI products in Australia and South East Asia. As you will probably already know, the man who will head-up this operation is none other than former head of Commodore in Oz and later President of Comodore Business Machines in USA, Mr Nigel Shepherd

Mr Sheperd was present at the June meeting of ACE(NSW) to introduce himself to our members, and to give us some insight into the future of ATARI AUSTRALIA and their products. I look forward to seeing and hearing more of both the company and Mr Shepherd in the future.

Following this sudden announcement, we returned to the more staid events of our normal meeting, with Mr Shepherd and the regular MOBEX visitors taking a keen interest in proceedings. My thanks to the following people for their work in providing what has been one of the most well received meetings in a long time.

Craig Armsworth: Lazer Chess, Balance Of Power & Xtron for the ST
John Palmer: Wordwriter for the ST
Special thanks to John for providing the overhead projector and transparencies.

Brian Elliot: Dragons' Tale for the 8-bitters.

Colin Grace: Colonial Conquest also for the 8-bitters.

The big highlight of the night though came late in the evening with a viewing and announcement of winners in the clubs innaugural Graphic Screens Competition. The judges were surprised at the quality of all entries. Congratulations to the four major prize-winners:

Ken Pilgrim (Mars Valley),
IanChamp (Earthpic),
Peter Wright (MIG-23)

Mark Driver (Captain Haddock). One interesting point was that all entries received were from owners of 8-bit computers. Where were all those ST owners with their supposedly unbeatable graphics capabilities. The resulting response from those who did enter has influenced the committee to consider offerring much better prizes for next years GSC. You had all best get started soon, as the current title holders are way out in front at

present, with at least one prize-winner already having invested in an ST. A disk containing all the best entries from the GSC will soon be available from the clubs software exchange.

July brought a report from president Colin Grace on the official launch of ATARI AUSTRALIA, which occurred during the previous month. (Since that time, numerous articles have appeared in the trade press, such as G.E.M. and APC).

Firstly, my apologies to the ST owners for the fact that we only had a 520 with a single sided drive at the meeting. This threw some of the demos that we had organised into confusion, as the demos had been set up on double sided disks. This problem should not occur again in the future.

Thanks to Keith Taylor: First Cad(ST)
Matthew Taylor: SDI(ST)

Joe Delman: Boulderdash and Super Boulderdash(8-Bit)

Peter Megarity: Ninja(8-Bit)

Myself: Rebound(8-Bit).

The highlights of the show though were talks by Tony McGrath on "C" programming (ST), and a very informative talk by Brian Petersen from our sister club in Adelaide. Brian told us about some of the hardware projects which he has been working on. These include turning a 520ST into a Mega 4ST lookalike with a new internal power supply and inbuilt drives. The price on this hot little item is very competitive with a 1040 if you only have 1 meg installed. You can add memory as you can afford it. I'll be getting more details from Brian, and we will see an article in a forthcoming issue of II.

Unfortunately, due to committments in other states, we did not have any reps from ATARI AUSTRALIA at this meeting, but I look forward to hearing of current developments at the next meeting.

Bye for now, and see you at the next meeting, where you can see for yourself the things that you've been missing.

BUSINESS AND COMPUTING NEWS

NEW SOUTH WALES INSTITUTE
OF TECHNOLOGY

TITLE: "Courses in the use of spreadsheets for financial planning and business forecasting"

Have just received a letter and covering brochure outlining details of an extension course. This is offered by the Faculty of Business or JULY (just passed) Don't despair, again the course is offered in Nov/Dec 1987 and then again in Jan/Feb 1988.

The course is to cater for those people in business; in finance; are new managerial appointees; and to owners of personal computers interested in extending their knowledge of computers beyond word processing.

Basitally the course will be in 3 modules. You can choose which module is applicable or whether you wish to do the whole course. If in doubt, contact the presenters for their appraisal

Session 1 assumes little knowledge of spreadsheets. Session 2 assumes a working knowledge of computers and the fundamentals of spreadsheets. Session 3 looks at the spredsheet as a decision making tool.

This course is of interest to users of LOTUS 123 and to those ST users who use VIP or VIP professional.

The courses will be presented by Dr. Patrick James Wilson and Mr. Rowan Trayley.

THE BOTTOM LINE: The course will run between the hours 5:30 to 8:30 Monday to Thursday and will cost each participant \$95.

FOR FURTHER INFORMATION Contact by mail

*Continuing Education Directorate
N.S.W.I.T.,
P.O. Box 123
BROADWAY, N.S.W. 2007

Interested parties need to obtain registration form. Remember to quote the above article title.
Telephone 20930

INTERESTED IN STARTING A BUSINESS?

Received a pro-forma from a USA based company called "ST-USE". The aim of the company is to "re-cycle" original software at a cost of 40% of the original list price, or to swap at 50%.

NSW do not know this company or its reputation, and is only included here "For your information" only. If you wish to avail yourself of the service, then it is at your own risk. However some smart business minded person may even form a division of the company here. If we get positive feedback from users, then, and only then, will the committee consider a group membership.

There is one problem I see with accepting the offer below is the USA Vrs Australia currency and postage requirements. The present airmail on USA letters is 44 cents from the USA and Australia Post is (as you know) quite different. You will need USA stamps. Also the cost of programs here is over 3 times the USA list price in the main. Sounds like a costly exercise unless done locally

These are the guidelines of ST-USE membership:-

1. If you wish to be able to exchange software (see item 3 below) there will be a membership fee of \$9.95 for individuals, and \$24.95 for groups. If \$2.00 is sent for information, etc, it will be credited towards the membership fee. If you only wish to purchase software only, no fee is required.

2. All software will be accepted and sold only with original program disks and documentation. The original packaging is necessary only if it can be considered part of the docs. In addition, you may not keep any copies of the program disk or docs after ownership has been transferred to ST-USE. We have conceived ST-USE as an alternative to pirating, hence, this will be an inflexible rule and a stipulation for membership. Implicit in any membership agreement will be the acceptance of the above.

3. All programs sold by ST-USE will cost a maximum of 50% of the original list price of that program, in some cases less. Again, in most cases, members will receive a credit of 25%

of the original list price to be used towards the purchase of any program in our inventory. If you are paying any "type" of cash for a program rather than exchanging (using a credit, etc) there will be an additional 10% discount, making the cash price of any program 40% of the original list price. Cash, Money orders, credits, C.O.D and master charge/visa will be shipped upon receipt of the order. Personal Checks (sic) must clear before an order will be shipped.

4. All sales will be considered final. No refunds or exchanges will be allowed. All programs will be tested before they are shipped. If a program is damaged in transit, we will provide another copy of the same upon receipt of the damaged program disk.

5. ST-USE reserves the right to reject programs which are considered to be ABSOLUTE "DOGS". If possible, please send the original packaging and registration cards, if available. All programs will be sold by ST-USE with the same unless we are requested not to.

6. We will ship any way that you request. Members pay shipping unless payment other than an ST-USE credit is being used and the total exceeds \$100. Please inform us if the shipping address is different from the mailing address we have on file. Send all packages to us either via US-MAIL or UPS. Our U.P.S address is:-

ST-USE C/O STEVE MORITZ
RTE 23 (NEXT TO FIRE HOUSE)
SOUTH EGREMONT, MA. 01258
TELEPHONE USA (413) 528-4728

7. Our data base will be updated on a weekly basis and all members will receive an updated copy on a monthly basis, and in addition, any current information we can provide about ST software. You may send in a stamped self addressed envelope at any time to receive an interim update.

If you have any further questions, do not hesitate to call us. In addition, we will try to provide advice if you need it so that your software selections will be both enjoyable and productive.

***** end of guidelines..I GUESS THE BALL IS IN YOUR COURT NOW....

MUSIC SIG

I am totally dismayed by the lack of interest, in music amongst the NEW ST users, musicians who have gone out and spent big bickies buying the best of all active sequencers, the ST. I cannot see why they are not into assisting each other. Many people actively into Music and have STs, come to our meeting once and walk out. The meeting is not what they want

Various shops say, go to the user meetings, and when they get there they see grown men playing new animated games, talking about business packages and programming languages that appear to be some kind of gobble-de-goop. Where is the music scene at the meets?

ACE NSW has been a users group since the word Atari meant computers in this country. It is obviously trying to cater for all types, but all types has suddenly in a massive revolution changed from the old 800s and XLs to become the ST and a new ball game has emerged.

I am no muse, I come from a musical family; my sister plays 9 instruments from Cello to keyboards and woodwinds. My elder brother has an incredible singing range from basso to counter tenor and currently hosts the classical radio shows in the Northern Territory. My younger brother is the rock star (or so he leads me to believe), and my mum has gone around Australia with numerous professional opera companies as the contralto. I am the recording engineer. Ask me to describe a French horn and I will tell you the 3-D displacement which it has in the pit.

There have been comments on the Bulletin Board (eh PRACS) about greater involvement in music. One suggested forming the Atari rock group. Another wanted help to get a certain synth configured.

As this is the starting point of a MUSICAL Special Interest Group, I am going to throw a question forward to those who have MUSIC STUDIO or the more expensive programs. This SIG should also include the 8 bit machine as it is a powerful monster when correctly driven (ie Music Construction Kit).

My question. I have the "Yammie" DX100

and it is playing a tune according to the sheet music. When a complex cord is hit, sometimes it pings at a totally incorrect frequency. This is not the synth, for the sound chip in the ST does it too. In the Construction Kit, the same complex does this non-harmonic jump. Always to a higher wrong note, a note that does not show on the screen. Firstly, have you struck this problem, and second, besides re-writing around it, how do you stop the "ping"?

Please, lets get involved in music. I feel like a one computer band.

LAZ

SOME ACTION UTILITIES

Brian Elliott
August 1987

In program development it is often very convenient to have an extensive tool box of utility programs. These utility programs can provide you with ready to go subroutines for direct inclusion in your program, or provide you with prototype S/Rs that you can use to get an idea up and going more quickly, or simply provide you with a working program skeleton that you can hang your own code around.

In this article I would like to share a couple of such utilities. These utilities address the often required "menu selection" process. I have taken two selection utilities from Dale Lutz of Eugene Ace and extensively modified them.

These utilities are called BLIPMENU.ACT and PSMENU.ACT and present two different ways of selecting an item from a given menu of items. Here I demonstrate their use in two ways.

Firstly there is the situation of a program that is driven through a basic menu selection procedure (eg Printshop or SynFile). MAINMENU.ACT provides an example of such a program. It can use either BLIPMENU or PSMENU to do the selection. MAINMENU provides a skeleton that can easily be modified to suit your own situation. The reader will see that MAINMENU is in fact, set up to handle another that I am working on, viz. a Music Composer/ Synthesizer. Perhaps I will succeed in having this finished for the next issue of Inside Info.

The second example, is the very common situation where it is necessary to choose one file from a set of files on a disc. This is demonstrated through DIRMENU.ACT which again uses either BLIPMENU or PSMENU.

Notice that BLIPMENU and PSMENU use the MMWINDOWS.ACT procedures for its help menus. In fact the parameters passed to the key procedure Getchoice() would allow these menu utilities to be used inside windows if the application required.

The ACTION code is well documented. To understand it, map out the hierarchy of procedure calls (Note how easy it is to use structural programming in a language such as ACTION) and just read through the code.

Drop us a line if you can think of ways to improve these utilities, or if you have other ACTION utilities that you can share with us.

```
=====
;MAIN DRIVER MODULE
;Skeleton for Menu Driven Programs
;
;Can be used with any program that
;initiates itself with a menu
;selection procedure.
;You will need to edit Main_Menu
;procedure to reflect your own
;tities
;and menu options
;You will also have to reset MaxCh
;to indicate your own allowed number
;of options
```

```
; You will also of course to write
; your own Do_Main_Choice Proc to
; execute your selection
=====
```

```
INCLUDE "D:MMWINDOWS.ACT"
INCLUDE "D:BLIPMENU.ACT"
;
; or
INCLUDE "D:PSMENU.ACT"
=====
```

BYTE FUNC Main_Menu (BYTE MaxCh)

```
; Main menu program set up initial
; screens and set up the menu
; options
; and go get a selection
```

```
BYTE Choice,Xstart,Ystart,Yend,Help
BYTE Xend
```

```
Menu(1) = "Retrieve a File"
Menu(2) = "Play that File"
Menu(3) = "Change a Phrase"
Menu(4) = "Change Repeat Count"
Menu(5) = "Change the Tempo"
Menu(6) = "Quit"
```

```
Hip_Menu(1) =
"Retrieve .. Load a Music File"
Hip_Menu(2) =
"Play Play the Current File"
Hip_Menu(3) =
"Change a Phrase . SYNTHESIZE"
Hip_Menu(4) =
"Repeat Set number of replays"
Hip_Menu(5) =
"Tempo sets the note duration"
Hip_Menu (6) =
"Quit the program"
```

```
Graphics (0) Poke (752,1)
Color=160 Plot (0,0)
DrawTo (39,0) DrawTo (39,22)
DrawTo (0,22) DrawTo (0,0)
Position(10,22)
Print ("Written in ACTION")
```

```
Position (10,1)
Print ("MUSIC COMPOSER PLAYER")
Position (13,2)
Print ("AND SYNTHESIZER")
```

```
Position (4,3) Print ("Version
1.0")
Position (18,4) Print ("by")
Position (14,5) Print ("Ken
Collier")
Position (12,6)
Print ("ACTION Version By")
Position (13,7)
Print ("Brian Elliott")
```

```
Position (11,9)
Print ("OPTIONS AVAILABLE")
Xstart=9 Ystart=10 Yend=19
Xend = 30 Help = 6
; use either the Blip or PrintShop
; choice selection procedure
Choice = GetChoice
(MaxCh,Xstart,Xend,Ystart,Yend,Help)
RETURN (Choice)
=====
```

```
PROC Do_Main_Choice (BYTE Choice)
DO
;do your own thing
IF (Choice=1) THEN
  Menu_Hip(1) ; Retrieve()
ELSEIF (Choice=2) THEN
  Menu_Hip(2) ; Play()
ELSEIF (Choice=3) THEN
```

```

    Menu_Hlp(3) ; Phrase()
ELSEIF (Choice=4) THEN
    Menu_Hlp(4) ; Repeat()
ELSEIF (Choice=5) THEN
    Menu_Hlp(5) ; Tempo()
FI
DO
RETURN
=====
;
PROC Main_Driver ()
BYTE Choice, MaxCh=[6]
DO
    Choice = Main_Menu (Maxch)
    IF (Choice=Maxch) THEN
        RETURN ; get out of it !!!!!
    ELSE
        DO_Main_Choice (Choice)
    FI
DO
RETURN
=====
;DISC DIRECTORY MODULE
;Skeleton for Disc File Selections
;
=====
INCLUDE "D:MWINDOWS.ACT"
INCLUDE "D:BL PMENU.ACT"
;      OR
INCLUDE "D:PSMENU.ACT"
=====
MODULE .
BYTE ARRAY Directory (1170)
; to hold directory contents
=====
BYTE FUNC Read_Directory ()
BYTE ARRAY Str(30)
BYTE Counter
CARD Base
10
Counter = 0
Base = Directory
CLOSE (1)
OPEN (1,"D1:# $",6,0)
WHILE EOF(1) = 0
DO
    InputSD (1,Str)
    ;"could put type test
    ;" at this point
    Counter==+1
    SCopy (Base,Str)
    ; save pointers
    Menu(Counter) = Base
    Base==+20 ;length
    OD
    Counter==+2
    CLOSE (1)
    RETURN (Counter)
=====
;=====
; Directory menu program . do
; initial
; screens and set up the menu
; options
; and go get a selection
;
BYTE Choice,Xstart,Ystart,Yend,Help
BYTE Xend
;
; Menu Array has been set up by
; Read_Directory () to contain disc
; directory
; Assume that there is No help menu
; Help = 0
;
Graphics (0) Poke (752 1)
Color=160 Plot (0,0)
DrawTo (39,0) DrawTo (39,22)
DrawTo (0,22) DrawTo (0,0)
Position(10,22)
Print ("Written in ACTION")
;
Position (13,1)
Print ("DISC DIRECTORY")
Position (13,2)
Print ("FILE SELECTION")
;
Position (11,4)
Print ("FILES ON THIS DISC")
;
Xstart=9 Ystart=5 Yend=20
Xend = 30 Help = 0
; use either the Blip or PrintShop
; choice selection procedure
Choice = GetChoice
    Maxch,Xstart,Xend,Ystart,Yend,Help)
RETURN (Choice)
=====
CARD FUNC Get_File_Name
    (BYTE File_Number)
;
BYTE ARRAY Temp(20) ,FileName (20)
CARD Base
BYTE POINTER b
BYTE Chr,co,a
;
Base = Menu (File_Number)
;
;extract characters in name
co = 0
FOR b= base+3 TO base+10
DO
    Chr = b^
    IF Chr = 32 THEN EXIT FI
    Co==+1
OD
=====
;
FILELOCN = Get_File_Name (Choice)
SCopy(File_Name,File_Locn)
=====
RDC Do_File_Choice (BYTE Choice)
DO
;do your own thing with the f =
DO
RETURN
=====
;
PROC File_Select ()
BYTE Choice,File_Count
BYTE ARRAY File_Name(20)
CARD File_Locn
;
; read directory
File_Count = Read_Directory()
;
; select a file
Choice = Dir_Menu (File_Count)
;
; get that file name
File_Locn = Get_File_Name (Choice)
SCopy(File_Name,File_Locn)
=====

```

```

; go do something with that file
PrintE(File_Name)
Delay(65000)

; Do_File_Choice (File_Name)
; DO_Main_Choice (Choice)

RETURN
;*****



;A PrintShop Menu Selection Utility
; ..... ..
;from Dale Lutz  Eugene ACE JAN 86
;modified by Brian Elliott ACE NSW
; August 1987
;

MODULE ; program driver routines
CARD ARRAY Menu (20)
    ,Hlp_Menu(20)
; . . . . .

;Global CARD ARRAY Menu must hold
;the addresses of the options.
;Global CARD ARRAY Hlp_Menu must
;hold
;addresses of minihelp on options

; (This Mini Help becomes available
; for a given Menu Option when the
; ? key is pressed.)
;
;
;Proc GetChoice is called allowing
;the user to use the Cursor Control
;keys to move up and down the menu.
;Faster control is by use of numeric
;keys. When the RETURN key is
;pressed
;the procedure returns the currently
;highlighted choice.

;BYTE Maxch .. number of options in
;        menu
;BYTE Xstart .. how far to space
;over
;        before start of
;print
;BYTE Xend .. how far to allow
;        to print across scrn
;BYTE Ystart .. how far to space
;down
;        before start of menu
;display
;BYTE Yend .. how far down to
;allow
;        the Menu to go
;before
;splitting into pages
;BYTE Help level of help
;        help available up to
;this menu choice

; Note that this routine can be used
; several times in a single program
; simply by changing the parameters
; before calling it
;=====
;"There is another page of options"
;=
; include in main program
;INCLUDE "D:WINDOWS.ACT" ; windows
;=====

PROC Delay (CARD Pause)
CARD a
FOR a= 1 TO Pause
DO
DO
RETURN
;=====
PROC PS_Help(BYTE Level,Help)
;window utilities used to indicate
;option selection procedure

BYTE Number=[0],a
BYTE Sx,Sy,Px,Py,Border,Fill
BYTE ARRAY Text

Sx=36  Sy=5  Px=2  Py=17  Border=1
Fill=0

Number=W_Open
    (Px,Py,Sx,Sy,Border,Fill,Number)
IF (level=0) THEN
    Text=
    "Use cursor keys to select option"
    W_PrintT(Px,Py,2,2,Text)

FOR a= 1 TO 3
DO
    Delay (24000)
DO
Text =
"Then use RETURN key
W_PrintT(Px,Py,2,2,Text)
FOR a= 1 TO 3
DO
    Delay (24000)
DO
Text =
"Or use ? key for mini help
W_PrintT(Px,Py,2,2,Text)
FOR a= 1 TO 3
DO
    Delay (24000)
DO
Text =
"ELSEIF (level=255)THEN
Text =
W_PrintT(Px,Py,2,2,Text)
FOR a=1 TO 5
DO
    Delay(24000)
DO
ELSEIF (level=254)THEN
Text =
>Select the previous page ?
W_PrintT(Px,Py,2,2,Text)
FOR a=1 TO 3
DO
    Delay(24000)
DO
ELSEIF (level<=Help) ;help available
THEN
Text = Hlp_Menu(Level)
W_PrintT(Px,Py,2,2,Text)
FOR a=1 TO 3
DO
    Delay(24000)
DO
FI

Number=W_Close(Number)
RETURN
;=====
;=
PROC Menu_Hlp(BYTE Level,Help)
    PS_Help(Level,Help)
RETURN

;=====
FOR a = a1 TO a2
=
BYTE FUNC GetChoice
(BYTE Maxch,Xstart,Xend,Ystart,Yend
,Help)
; go get the users selection

CARD Spc
BYTE a,b,key, choice,oldchoice
BYTE SetN,a1,a2,a22,a0,first
BYTE ARRAY Temp(30)

```

```

Setn=0 First = 1
yend==3 ;padding

A1 = 1 a2 = Maxch
a22=yend + 1 - ystart
;; IF a22>9 THEN a22=9 FI
IF (a2>a22) THEN
  a2 = a22-1
  SetN = 1
FI

;-----
Choice = Maxch+1
WHILE Choice>Maxch
DO

  Spc="
  POKE (Spc,Xstart) ;tricky ??
  POSITION (3,Ystart) PutE()

  FOR a= ystart TO yend
  DO ;clear previous screen
    FOR a0 = 1 TO Xend-1
    DO
      Print (" ")
    OD
    PrintE (" ")
  OD
  POSITION (3,Ystart) PutE()

  IF (SetN>1) THEN
    a0=1 Print (Spc)
    PrintE ("*Previous Page ?")
  ELSE
    a0=0
  FI

;----- ; options for current page:
DO
  a0=a0+1
  Print (Spc)
  PrintE (Menu(a))
OD

;----- IF (Setn>0) THEN
  a0=a0+1 Print (Spc)
  IF a2< Maxch THEN
    PrintE("*Next Page ?")
  ELSE
    PrintE ("*NO MORE GO BACK")
  FI
FI

;----- IF (First=1)THEN
  PS_Help(0,Help)
  First=0
FI

;----- ; get user's choice
  CLOSE (3)
  OPEN (3,"K:",4,0)
  Key=0
  Oldchoice=a0
  Choice=1
  WHILE Key<>155 DO
    IF Key=28 OR Key='-' THEN
      Choice=-1
    ELSEIF Key=29 OR Key='+' THEN
      Choice=+1
    ELSEIF key<='9' AND key>'0' THEN
      Choice = Key-48
    ELSEIF Key = '?' THEN
      ; help request
      a=choice
      IF (SetN=1) THEN
        IF (a=a0) THEN
          a=255 ; next page
        ELSE
          a=a+1
        FI
      ELSEIF (Setn>1)THEN
        IF (a=a0)THEN
          a=255
        ELSEIF (a=1)THEN
          a=254 ;previous page
        ELSE
          a=a+1-2
        FI
      FI
      PS_Help(a,Help)
    ELSEIF (KEY)0) THEN
      PS_Help(0,Help)
    FI
    IF Choice=0 THEN Choice=a0
    ELSEIF Choice>a0 THEN Choice=1
    FI

    IF OldChoice<>Choice THEN
      Position (3,Ystart+Oldchoice-1)
      PutE()
      Print(Spc)
    IF (Setn=0)THEN
      PrintE(Menu(OldChoice))
    ELSEIF (SetN=1) THEN
      IF (OldChoice=a0)THEN
        PrintE ("*Next Page ?")
      ELSE
        PrintE (Menu(OldChoice+a1-1))
      FI
    ELSEIF (SetN>1)THEN
      IF (OldChoice=1) THEN
        PrintE ("*Previous Page ?")
      ELSEIF (OldChoice=a0)THEN
        IF (a2<Maxch)THEN
          PrintE ("*Next Page ?")
        ELSE

```

```

          PrintE ("*NO MORE GO BACK")
        FI
      ELSE
        PrintE
        (Menu(OldChoice+a1-2))
      FI
    FI
  Position (3,Ystart+Choice-1)
  PutE()
  Print(Spc)
  IF (SetN=0)THEN
    SCopy (Temp,Menu(Choice))
  ELSEIF (SetN=1) THEN
    IF (Choice=a0)THEN
      SCopy(Temp,"*Next Page ?")
    ELSE
      SCopy
      (Temp,Menu(Choice+a1-1))
    FI
  ELSEIF (SetN>1) THEN
    IF (Choice=1) THEN
      SCopy(Temp,"*Previous Page ?")
    ELSEIF (Choice=a0) THEN
      IF (a2<Maxch)THEN
        SCopy(Temp,"*Next Page ?")
      ELSE
        SCopy
        (Temp,"*NO MORE GO BACK")
      FI
    ELSE
      SCopy
      (Temp,Menu(Choice+a1-2))
    FI
  FI
  SCopy
  (Temp,Menu(Choice+a1-2))
  FI
  ;----- ; check choice and see if new page
  ; is required
  IF (Setn>0)THEN
    IF (Setn>1)THEN ;check for
      backup
    FI
  ELSEIF (Choice=1)THEN
    Choice=Maxch+1 ; to force
    ;looping
  FI

```

```

Setn == -1
a2 = a1 -1
a1 = a1-a22 +1
IF (Setn>1)THEN
  a1==+1
  FI
  FI
;check for next page option
IF (Choice=a0)THEN
  Choice=Maxch+1
  IF a2<Maxch THEN
    Setn==+1
    a1 = a2 +1
    a2 ==+a22-2;leave room for 2
;check that not past max
  IF (a2>maxch)THEN
    a2 = Maxch
    FI
    FI
  ELSE ; valid selection made
  ; reset choice flag
  choice=choice + a1-1
  IF (Setn>1)THEN
    Choice==+1
    FI
    FI
  ELSE ; only onepage of choices
  ; should just exit
  ; with a valid choice
  FI
-----
DO
  RETURN (Choice)
;*****A "blipping" menu selection utility
; . . . . . . . . .
;from Dale Lutz .. Eugene ACE May 85
;modified by Brian Elliott ACE NSW
; August 1987
; . . . . . . . . .

MODULE ; program driver routines
CARD ARRAY Menu (20)
  ,Hlp_Menu(20)
;***** . . . . . . . . .

;Global CARD ARRAY Menu must hold
;the addresses of the options.
;Global CARD ARRAY Hlp_Menu must
;hold
;addresses of minihelp on options
;
;(This Mini Help is toggled ON by
the

; use of the Atari (Inverse) key.
; This Mode must be Toggled OFF to
; get back to the Select Mode.
;
;
;Proc GetChoice is called allowing
;the user to enter a number for the
;selection of choice. A Blipping
;routine moves a "cursor"
continually
over the allowed selections.
an incorrect entry results in a
brief flash of background and the
blipping then continues

; The users choice is returned from
; the procedure.
;BYTE Maxch    number of options in
;               menu
;BYTE Xstart    how far to space
;over
;               before start of
;print
;BYTE Xend      how far to allow
;menu
;               to print across scrn
;BYTE Ystart    how far to space
;down
;               before start of menu
;               display
;BYTE Yend      how far down to
;allow
;               the Menu to go
;before
;               splitting into pages
;BYTE Help      level of help
;               help available up to
;this menu choice

; Note that this routine can be used
; several times in a single program
; simply by changing the parameters
; before calling it.
;=====
; include in main program
;INCLUDE "D:MWINDOWS.ACT" ; window
;=====
PROC Delay (CARD Pause)
CARD a
FOR a= 1 TO Pause
DO
DO
RETURN
;=====
PROC Blip_Help(BYTE Level,Help)
;=====
;window utilities used to indicate
;option selection procedure
BYTE Number=0,a
BYTE Sx,Sy,Px,Py,Border,Fill
BYTE ARRAY Text
Sx=36  Sy=5  Px=2  Py=17  Border=1
Fill=0

Number=W_Open
  (Px,Py,Sx,Sy,Border,Fill,Number)
IF (level=0) THEN
  Text=
"Enter Number for option required"
  W_PrintT(Px,Py,2,2,Text)
  FOR a=1 TO 3
  DO
    Delay(24000)
  DO
    Text=
"Toggle Inverse Key to get help "
  W_PrintT(Px,Py,2,2,Text)
  FOR a=1 TO 3
  DO
    Delay(24000)
  DO
    Text =
"Toggle Inverse key Off to select"
  W_PrintT(Px,Py,2,2,Text)
  FOR a=1 TO 3
  DO
    Delay(24000)
  DO
    Text =
"ElseIf (level=255) THEN
  Text =
"There is another page of options"
  W_PrintT(Px,Py,2,2,Text)
  FOR a=1 TO 5
  DO
    Delay(24000)
  DO
    Text =
"ElseIf (level=254) THEN
  Text =
>Select the previous page ? "
  W_PrintT(Px,Py,2,2,Text)
  FOR a=1 TO 3
  DO
    Delay(24000)
  DO
    Text = Hip_Menu(Level)
  W_PrintT(Px,Py,2,2,Text)
  FOR a=1 TO 3
  DO
    Delay(24000)
  DO
    Text =
"ElseIf (level<=Help) ;help available
  THEN
  Text = Hip_Menu(Level)
  W_PrintT(Px,Py,2,2,Text)
  FOR a=1 TO 3
  DO
    Delay(24000)
  DO
    Text =
"FI

```

```

Number=W_Close(Number)
RETURN
=====
=
PROC Menu_Hlp(BYTE Level,Help)
  Blip_Help(Level,Help)
RETURN
=====
=
PROC Blip(BYTE MaxCh,Xstart,Ystart)
;moves up and down the menu options
; blipping the number of the option

BYTE Count = [0]
IF Count>MaxCh-1 THEN
  Count=0
FI
Ystart==+1
Position (2+Xstart ,Ystart+Count)
Put ('1 + Count)
Count==+1
IF Count > MaxCh-1 THEN
  Count=0
FI
Position (2+Xstart,Ystart+Count)
Put ('1+128+Count)
RETURN
=====
BYTE FUNC GetKey
(BYTE MinCh,Maxch,SetNo,OffSet,Help)
; Get a digit between Minch and
Maxch

; SetNo = page # of available
choices
; Offset = Offset for start of page
; in choice #
; Help = largest menu # for which
; help is available

BYTE Number,a
BYTE Color4=712 ;Col register#4
, HoldColor
Close(2)
Open (2,"K:",4,0)
Number=GetD(2)-48

IF (Number<MinCh OR
Number>Maxch)THEN
;flash background as warning
  HoldColor=Color4
  Color4=14
  Delay(3000)
  Color4 = HoldColor
  IF (Number>=Minch+128 AND
  Number<=Maxch+128) THEN
    ; help request
    a=Number-128
    IF (SetNo=1) THEN
      IF (a=MAXch) THEN
        a=255 ; next page
      ELSE
        a=a+Offset-1
      FI
      ELSEIF (Setno>1) THEN
        IF (a=Maxch) THEN
          a=255
        ELSEIF (a=Minch) THEN
          a=254 ;previous page
        ELSE
          a=a+Offset-2
        FI
      FI
      Blip_Help(a,Help)
    ELSE
      Blip_Help(0,Help)
    FI
  Close(2)
  RETURN (Number)
=====
BYTE FUNC GetChoice
(BYTE Maxch,Xstart,Xend,Ystart,Yend
,Help)
; go get the users selection

```

```

CARD Spc
BYTE a, key=764, choice
BYTE SetN,a1,a2,a22,a0,first

Setn=0 First = 1
yend==+3 ;padding

a1 = 1 a2 = Maxch
a22=yend + 1 - ystart
IF a22>9 THEN a22=9 FI
IF (a2>a22) THEN
  a2 = a22-1
  SetN = 1
FI

Choice = Maxch+1
WHILE Choice>Maxch
DO
  Spc=""
  POKE (Spc,Xstart) ;tricky ??
  POSITION (3,Ystart) PutE()

  FOR a= ystart TO yend
  DO ;clear previous screen
    FOR a0 = 1 TO Xend-1
    DO
      Print (" ")
      DO
        PrintE (" ")
      OD
    POSITION (3,Ystart) PutE()
  FI
  OD
  ; check choice and see if new page
  ; is required
  IF (Setn>0)THEN
    IF (Setn>1)THEN ;check for
      a0=1 Print (Spc) PrintB(a0)
      PrintE ("." Previous Page ")
    ELSE
      a0=0
    FI
  -----
; options for current page
FOR a = a1 TO a2
DO
  a0=a0+1
  Print (Spc) PrintB(a0)
  Print(" ")
  PrintE (Menu(a))
OD
;-----
IF (Setn>0) THEN
  a0=a0+1 Print(Spc)
  PrintB(a0)
  IF a2< Maxch THEN
    PrintE(" Next Page ?")
  ELSE
    PrintE " NO MORE GO BACK"
  FI
FI
;-----
Position (2+Xstart,Yend+3)
PrintE("Your Choice-- ")
IF (First=1)THEN
  Blip_Help(0,Help)
  First=0
FI
; get user's choice
Choice=Maxch .
WHILE Choice<1 OR Choice>a0
DO
  Key=255
  WHILE Key=255
  DO
    Blip (a0,Xstart,Ystart)
    Delay (8000)
  OD
  Choice=GetKey(1,a0,SetN,a1)
  IF (Choice>0 AND
  Choice<= Maxch)THEN
    Position (18+Xstart,Yend+3)
    PrintB(Choice)
  FI
  OD
;-----
; check choice and see if new page
; is required
IF (Setn>0)THEN
  IF (Setn>1)THEN ;check for
    a0=1 Print (Spc) PrintB(a0)
    PrintE ("." Previous Page ")
  ELSE
    a0=0
  FI

```

```

IF (Choice=1)THEN
  Choice=Maxch+1 ; to force
  ;looping
  Setn == - 1
  a2 = a1 -1
  a1 = a1-a22 +1
  IF (Setn>1)THEN
    a1==+1
  FI
FI
;check for next page option
IF (Choice=a0)THEN
  Choice=Maxch+1
  IF a2<Maxch THEN
    Setn==+1

  a1 = a2 +1
  a2 ==+a22-2;leave room for 2
;check that not past max
  IF (a2>maxch)THEN
    a2 = Maxch
  FI
FI
ELSE ; valid selection made
; reset choice flag
choice=choice + a1-1
IF (Setn>1)THEN
  Choice==+1
FI
FI

```

```

ELSE ; only onepage of choices
; should just exit
; with a valid choice
FI
;
```

```

DD
RETURN (Choice)
*****
```



ADVENTURE ARENA

by Peter Megarry

This month's column is a break from tradition that I'm sure will have the purists up in arms! When I started writing these articles, I decided to feature Adventuring and ALL its related fields. In my eyes this encompasses Role Playing Games as a whole. They generally involve directly adopting an alter ego, problem solving, and working towards an ultimate goal. This plainly sets them, along with traditional text Adventures, apart from the purely strategic wargame, the simulation (which strives to emulate real time situations), or the random and open ended arcade game.

Most readers will be familiar with the ULTIMA series of RPG's. I recently had the chance to play a new game produced by the same team.

AUTODUEL by Lord British and Chuckles is based on the "Car Wars" board game by Steve Jackson. It places you in a world of the near future (circa 2030), on a map covering an area of the continental U.S.A. bounded by Boston, Waterton, Pittsburg and Washington. Lawlessness is the order of the day. The economy of the American continent is centered around the production and use of super motor vehicles which are virtual mobile fortresses. After creating a character by allocating 50 points between driving, marksmanship and mechanical skills, you find yourself in New York city with \$2000 in cash and no other possessions. The first thing to do is to pay a visit to the friendly truck stop nearby. Here you are well advised to purchase some body armour, which makes your chance of survival considerably greater. The stop also provides reasonably priced, safe over-night accommodation. Further exploration of the city will reveal such things as a combat arena, garage, salvage yard, weapon shop, motor vehicle plant, a dingy bar frequented by low life, the office of the F.B.I., an A.D.A office and a Gold Cross health station. Other cities do not necessarily contain the same establishments.

For the novice Autoduelist looking for fun and profit, the combat arena provides an amateur night competition. Here you are provided with a killer go-kart with which you can battle the opposition to the death, in a winner take all competition. Daily gladiatorial bouts in various handicap divisions ranging from the killer-karts to battles between juggernauts armed with lasers and rockets, provide the blood thirsty future populace with its main entertainment. As your initial funds are a little on the light side, the winners purse provides a means to build your bank balance to a point where you can pay a visit to the local auto plant and buy yourself some transport of your own. You can choose between different body types, strengthen or weaken chassis and suspension, choose power plant size, select and arrange armour plating, choose tyres and finally select and mount weapons in any position on the body. The vast number of possible combinations allow you to set up the vehicle for all round performance or any specialised use you have in mind. As your wealth grows you can build other vehicles which when not in use can be stored in any city which has a garage.

Once you are mobile many avenues of gaining income are opened up to you. You can continue to compete in the arena. Higher divisional competitions carry greater prize money but are far more risky also. You might decide instead on a bit of bounty hunting on the open highways. Once you leave the relative safety of the city it's every man for himself. Any outlaw cars you defeat can be stripped of ammunition for your own weapons and parts that can be sold to salvage yards. Offices of the A.A.D.A (American Auto Duelists Association) can be found in most cities present in the game. These provide status reports regarding outlaw activity on the various highways and freeways, and provide courier work for drivers. Good rewards are to be had if you can get your load to its destination on time while avoiding the road scavengers along the way. For those with few scruples a quick buck can be made by getting courier jobs and selling them on the black market to other drivers for a percentage of the fee. This boosts the wallet but depletes experience points.

After surviving an encounter on the road or in the arena you will probably need to visit the local garage, where for a fee you can get repairs done to your vehicle. While waiting you might like to take a mechanics course, which increases the chance of salvaging usable parts from wrecks. A visit to the weapons shop to restock any depleted ammunition and you're fully operational again.

Along the way you are sure to sustain some physical wounds. Treatment and a good rest in one of the Gold Cross Hospitals will repair this. The ultimate insurance for those who can afford it, is to buy and store a clone which upon your death is activated. You loose the vehicle you were driving at the time as it is considered destroyed, but all experience points and wealth you have amassed is passed to your new cloned body. This is an invaluable feature as it takes quite some time to build up your characters strengths. Which leads me to my only gripe which is that when first generated, your character is very vulnerable. You will probably have to regenerate a number of times before you survive for more than a short time span. This involves several disk changes and quickly becomes irksome. As you build up your skills your chance of a quick death lessens somewhat.

Screen displays are menus, city maps and scrolling highways and arenas. All unfortunately in artifacted graphic mode which is bad news for we PAL users. In spite of the spartan black and white graphics and primitive sound, I found Autoduel very enjoyable to play. It has a good balance of all the elements of a usual RPG plus great arcade style combat sequences. Unfortunately I only had use of the program for a limited time. Even so, it was apparent that there is a subtle plot underlying the immediately obvious gameplay, which would become more apparent in later stages.

At \$99 the program isn't cheap, but I think anyone investing in it would get good value for their money. I recommend it to anyone looking for something a little different.

Autoduel can be obtained from :-
COMPUTER 1 282 Alison Rd, RANDWICK,
2031

So far, still no reply from Telecom. I have heard rumours and read the media comments, some say that Bulletin Boards will be excluded from the charges. No matter whether Bulletin Board systems are excluded, this service providers charge will be charged and charged the business community. This means that businesses are still in the lime light to have the cream extracted.

As far as PRACSA (Public Remote Access Computer Systems Association of Australia) is concerned, well it officially formed on September 5th. Their aims are good, and ACENSW is a foundation member. For a full account of the Aims of Pracsaa, some of the popular commercial magazines (like G.E.M.) cover it in detail.

PRACSA is not a NSW body calling itself Australia's mouthpiece for telecommunications by modem, rather its roots evolved here because the sysops in Sydney were first to stir against the immorality of this new tax on the youth and those wanting to better themselves.

Being on the steering Committee to establish PRACSA, I can say first hand what happened in its foundation. I was not impressed by the political squabbles caused by a few responsible sysops who were out to kill PRACSA without giving it a hearing.

Some went off the deep end decrying its very being and what it was attempting to do. Some who never even attempted to attend a single meeting, and were personally invited became the most vocal misinformed and deluded critics.

Basically PRACSA aims to bring all modem owners together as independent users. The ominous shadow of Telecom's definition for a commercial interest, meant that the constitution created had to distinguish between amateur users, the sysops and commercial interests.

The major responsibility of PRACSA being one of education. Of secondary consideration is the free exchange of information. PRACSA must be a self regulating, self policing body. For all our sake, it must stop this bad attitude that all modem users are hackers who committ computer fraud.



In the US recently, the FCC announced that from January 1st, all data traffic on the phone lines will be charged at the rate of \$5.00 per hour 24 hours. This will become law, and the phone companies will have to abide by it. Compuserve and many US data bases are up in arms over this. Capitol Hill Atari Owners Society have been very up-to-date with the goings on, and I have had a request to send our Inside Info on an exchange basis.

Believe it or not, the FCC suggested a flat rate, 24 hours. Compuserve in their submission suggest what Telecom are suggesting here, with a two tier pricing structure.

The problem is further antagonised by the fact that the FBI just busted 16 young hackers breaking into "BIG" financial data bases. The 16 are being charged with computer fraud. This now blackens "ALL" users as hackers. It is the same philosophy as the introduction of the ozzy card...because there is a 0.1% tax evasion, then all you are guilty and you must have the card or suffer severe financial penalties. Thank goodness that the ozzy card has been given the chop. But lets not get political. Data traffic should not be discriminated against. It is another form of audible communication as is the human voice when using the phone.

The constitution establishes PRACSA as a national body with one voice, but open for the formation of Pracsaa in each state as a sovereign body under the one banner. Logistically this sounds frightfully expensive, but over the modems one can easily partake in a conference hundreds of kilometers away. For more info, get onto one of the board.

02- 529-2059 ACE
02- 527-7007 Paragon (IBM)
02- 529-8249 CSACE

I have been approached to assist in the formation of a new board. Not in Sydney, but out West, like way out WEST, and turn right. This should feed the area around Bourke, Cobar etc.

I will give full support to this and any other affiliated Atari group in setting up their own system. But please bear with me until I have some time! Three caps are to much to handle at present.

I must do some work on the modem. There have been far to many complaints about the modem again, (even the Atari Corp. complained). The Avtek is 5 years old and showing signs of old age. It does not allow 1200 or 1200/75 baud, nor anything higher like 2400, 4800, or 9600 baud. I have mentioned Paragon above because it is running all baud rates, and is hard disk based. ACE BBS ST has 1 megabyte to play with, of which half is consumed by house keeping and general files.

To give all the users the support that they require, I cannot see the present system being relevant unless funds are made available for a new modem and hard disk. These are becoming mandatory within the next 12 months. If some company wishes to sponsor the BBS to improve this situation please write to the committee. Maybe you have a cost efficient answer ACE NSW cannot afford such a purchase just yet..

THIS

ENTIRE

COPY

OF

INSIDE

INFO

IS

AVAILABLE

ON

DISK

FOOD FOR THOUGHT

WHAT, CHRISTMAS AGAIN?

Yes, and its on the door step, information has been arriving in bulk as to all the new goodies available for the Ataries.

From ICD Inc., a series of newsletters that are of note. ICD have been in the peripheral cable market, for the 400/800/XL/XE systems.

The Serial to Parallel Centronics printer connector cable and a new serial to modem cable/printer called the "P:R: Connection" is an alternative to the 850 interface. To this there is a range of you build it yourself kits for the ST.

The ST Host/Controller Kit consists of the Adaptec ACB4000 A MFM controller, supporting two hard drives. The data transfer rate is claimed at being three times the SASI WD1002-SHD or XEBEC 1410. It is designed to connect to industry standard hard disks. Its Cost is \$250 US and optional for another \$50 is the RLL controller. Then there is the ST HOST Adaptor kit to support up to 7 drives. This starts at \$US 140 and the SCSI MFM controller adds \$135, or the RLL controller at \$185.

ICD also offer a bulletin board system called "BBS Express' ST" for \$US80. Reports from O/S BBS users give this a good rap-up, with on-line games. It requires a hard drive.

RAMBO XL looks most interesting as it upgrades the 800XL or 130XE into a quarter meg machine. The initial cost is \$US40, but then you need eight 256 DRAMS, so that puts your cost up to about \$200 Australian depending on the DRAM costs. One must shop around.

ICD inc are located at 1220 Rock St, ROCKFORD, IL 6101-1437.

Other adds noted.. In the US, 5.25 inch disks are selling new for 27 cents, and the ST disks at 89 cents each. These are in lots of 100 and 50 respectively. Available from MEI/Micro Centre 1555 W.Lane Avenue, Columbus, OH 43221. The bigger the buy, the cheaper. phone is 1-614-481-4417. Consider the Duty and freight before considering any purchase for any quantity.

In the USA one can buy a 520ST for a less than one earns in a week. It is 4 weeks here for the average worker.

COMMENT A PROMISE OF THINGS TO COME

THE AGM 1987

Yes it is that time of year again, and possibly the most interesting of all meetings to date is about to take place.

There are three motions before the members. Then the election of office bearers.

If you want change in the club, now is the time to do it. Throughout the course of this edition, a rather full and crammed packed edition, I have urged change and requested articles. My aim is not to split the club, rather to stimulate thought and "comment"

The last two years have been difficult for the committee, and I see the next ten years as far more difficult. The reason is the fact that ACE(NSW) must be an interface between the 8 and 16 bit users. In the short term, say 3 years, it is clear that we will need to cater for the following:

8 bit 6502
8 bit PC
16 bit ST
16 bit PC
32 bit Transputer WS

where WS is work station. The last is perhaps the most important development in computers since the quantum jump into programminginary languages. It means "Real time" analysis.

In my review on DBASIC I quote the speeds that are possible in the ST. I look at the 68000 running at 8 MHz and the figures on the Transputer running in slow mode at ten times this rate. A transputer is capable of 10 million per second, and better since its clock speed can be in the 6GHz range (1,000 MHz) plus.

This means that the committee will need to cater for and address a totally new market place. One of the biggest problems currently is addressing the ST market place in Sydney, the musicians, The businessmen, the graphic artist, the astronomer and the engineer.

There have been comments made by some that ACE NSW is ACE Sydney. No Way! Sydney is where it is happening and the Committee needs much new blood to look at these developments, the new markets address the problems, set the goals, and make ACE NSW survive. It will be the responsibility of ACE to cater for All Atari Users in NSW.

This AGM will see most of the Committee stand down for the new blood. No, they are not deserting a sinking ship, far from that. Each member, including myself is exhausted. I will re-stand because I thrive in work (who me a workaholic, what's this thing called recreation, most treat it as wreck creation). Seriously, the opinion is that we must strive for professionalism, perhaps to run one meeting and two or more workshops per month. The meeting and Inside Info being almost identical

This could mean that Inside Info in its present form will need to become "just a news letter" and all programs supplied on disk/ tape/ card/ cartridge. supplied from each workshop.

We are about to hyper drive into the 1990's, so your new committee must take the club along a broad path, a walk on the wild side and specializing in "All" computers. Obviously the BBS (PRACS) should be one of the hubs involved in this change.

The ST software for instance is already going this way. Tony McGrath just invested in a hard disk to make this job more efficient and simpler. Tony will also be standing again.

Work commitments, and other outside pressures have also taken their toll on the committee.

On your behalf, I wish to thank all the retiring committee for the tremendous job they have done over the past two years.

LAZ

ST ACC FILES

Files on the ST which have the extender .ACC

are desk top accessory files. As the ST boots up, these load in sequentially. Although a disk may have thirty or more such files, only the first five are loaded. Some of these can be hidden like "MITES" (waiting for the user to press that mouse button before eating the screen). Others can be complete games that run instantly on loading.

If you have a disk with a myriad of ACC files, and you want to see them, the best way is copy all of them into a ram disk. Insert a blank disk into the drive, and format it. Create a folder called eh, the name AXE.

Now copy all the files in the Ram disk into this disk folder, so that no ACC file is seen on the top menu.



STep 1. Take your cursor to the Desk and the first 5 ACC files will be show. For this exercise, we don't want any of them. Reboot the system. Since nothing was on the top, except AXE folder, the system will re-initialize with no ACC files.

STep 2 is to create some more empty called "GREAT", "GAME", "APPLICATION", "BAD", "COMEDY" ETC ETC.

STep 3 is to copy one ACC file out of the folder, onto the top level. To get it to load means to change applications or to reboot.

STep 4. Take the cursor to the DESK drop down and see what is in it. WARNING.. Always eject the disk before trying a new Accessory.

STep 5. Click the mouse on the label to see what happens. If safe, re-insert the disk, and copy the ACC file into one of the other newly created folders.

STep 6. DELETE the ACC file from the top menu.

STep 7. Copy out the next ACC file from the AXE folder, and repeat from STep 3.

There are some truly amazing ACC files.



UNBELEVABLE BASIC.

SPEED, ACCURACY
CAPABILITY



```

100 CLS
110 PI=3.1415926
120 C=COS(PI/3):S=SIN(PI/3)
130 C1=COS(PI/36):S1=SIN(PI/36):SF=.95
140 X=200:Y=0:CX=320:CY=200:SC=1.16
150 FOR JZ=1 TO 70
160 FOR IX=0 TO 6
170 SX=X*SC+CX:SY=CY+Y
180 IF IX=0 THEN SX1Z=FIX(SX):SY1Z=FIX(SY)
190 LSET (SX1Z,SY1Z)-(FIX(SX),FIX(SY))
200 SX1Z=FIX(SX):SY1Z=FIX(SY)
210 XN=X*C-Y*S:Y=X*S+Y*C:X=XN
220 NEXT IX
230 XN=SF*(X*C1-Y*S1):Y=SF*(X*S1+Y*C1):X=XN
240 NEXT JZ
250 X=200:Y=0:CX=320:CY=200:SC=1.16
260 FOR JZ=1 TO 70
270 FOR IX=0 TO 6
280 SX=X*SC+CX:SY=CY+Y
290 IF IX=0 THEN SX1Z=FIX(SX):SY1Z=FIX(SY)
300 LCLR (SX1Z,SY1Z)-(FIX(SX),FIX(SY))
310 SX1Z=FIX(SX):SY1Z=FIX(SY)
320 XN=X*C-Y*S:Y=X*S+Y*C:X=XN
330 NEXT IX
340 XN=SF*(X*C1-Y*S1):Y=SF*(X*S1+Y*C1):X=XN
350 NEXT JZ
360 GOTO 140

```

DBASIC

I AM AMAZED (A REVIEW)

Everyone knows that I am the BASIC freak, considering the BASIC language is much maligned and snubbed by even so called computer experts. I see all good programming as a function of how the programmer thought out the concepts and logic, and then how this was applied.

BASIC went the wrong way, and many irrelevant programmers set themselves up as some kind of Basic Guru, preaching untruths and BAD programming technique to the novices. This made many great concept basic programs run so dreadfully slow that BASIC got this stigma of being "yuck".

There are three kinds of BASICs.

1. the interpreter basic (such as found in most home computers like the 8 bit Atari Basics, revisions A, B and C). Some functions are very powerful, and others weak, such as the mathematical accuracy. Here the code is tokenised, line by line, and is is the machine's ASCII compacted code. All line numbers are expressed in two bytes, giving a maximum addressable line number of 128*256 or 32767

2. the Editor basic is one where the ASCII TEXT code is entered through an editor (just another word processor). The file will not run in this environ, until the listed file is entered into the compiler. The compiler uses look up tables and libraries to put the code into machine language routines that may or may not be the best way to do the job.

3. the Interactive Compiler Basic is the best of both worlds, instantly compiling the code into tight machine language. Here, the code is packed into the smallest possible memory area, where labels can be used to denote jumps and gosubs. The Term ST file does not always look like the original ASCII text, for the compiler must de-compile the code. The code generated can stand alone as does "C". In certain instances, it can be faster than "C" depending on how the programmer built the program.

DBASIC 21 MAY 87 COPYRIGHT 1987 DTACK GROUNDED INC

```
100 START TIMER  
110 FOR IZ=1 TO 1000  
120 FOR JZ=1 TO 1000  
130 NEXT JZ:NEXT IZ  
140 T=TIMER(0)  
150 PRINT "TIMER = ";T;"SECONDS"
```

TIMER = 17.64 SECONDS



```
100 REM BYTE SIEVE, SIZE 7000, TEN ITERATIONS  
110 ;  
120 CLS:VTAB 10:PRINT "CALCULATING 10 ITERATIONS OF THE BYTE SIEVE BENCHMARK"  
130 VTAB 12:START TIMER:DIM FLAGS%[7002]:PRINT "SIZE 7000, 10 ITERATIONS"  
140 FOR MX=1 TO 10:COUNT%0:INIT FLAGS%[]:1  
150 FOR IX=1 TO 7001:IF FLAGS%[IX]=0 THEN NEXT IX:GOTO 190  
160 PRIME%=IX+IX+3:KZ=IX+PRIME%  
170 IF KZ>7001 THEN COUNT%+1:NEXT IX:GOTO 190  
180 FLAGS%[KZ]=0:KZ=KZ+PRIME%:GOTO 170  
190 NEXT MX:T=TIMER(0):PRINT COUNT%;" PRIMES FOUND"  
200 PRINT "ELAPSED TIME (10 ITERATIONS) = ";T;"SECONDS"  
210 PRINT "TIME PER ITERATION = ";T/10;"SECONDS"
```

CALCULATING 10 ITERATIONS OF THE BYTE SIEVE BENCHMARK
SIZE 7000, 10 ITERATIONS
1651 PRIMES FOUND
ELAPSED TIME (10 ITERATIONS) = 8.4 SECONDS
TIME PER ITERATION = .84 SECONDS



```
100 ; CALCULATION BENCHMARK, BYTE MAY '84 P.282  
110 ;  
120 START TIMER:N=5000:A=2.71898:B=3.14159:C=1  
130 FOR I=1 TO N:C=C*A:C=C*B:C=C/A:C=C/B:NEXT I  
140 ERR=1-C:T=TIMER(0):PRINT "ERROR=";ERR  
150 PRINT "TIME = ";T
```

ERROR= 0
TIME = 3.56



All I will say about ST basic is that it could have lost Atari a sale, for if I had seen it before I brought my ST, I would not have. Slow, cumbersome and uses a massive amount of memory to do little. Yet exists in my collection as something to use when there is nothing else. The mathematical functions are so poor that it downgrades the ST's sheer brilliance. The editing facility is poor, and is not as the 8 bit Atari owners are familiar with.

DBASIC by DTACK Grounded Inc

This is what many ST owners expect from their ST. The basic is fast and memory efficient. Of course this means one thing; it is an interactive compiler basic of the best kind. It has full on screen editing and many more options.

This is a basic for the ST. Any 8 bit users will find the program listing a bit alien, for the user must define in the variable name whether or not the variable is integer or floating point. This is because DBASIC actually compiles each as it is entered. Called the VARN (VARiable Name), it can be in upper or lower case or even a mix of both. The status of the variable is given by naming it with the % sign.

```
varn    constant    type
A        115.6578  floating point
AZ       115        integer
```

In this DBasic, there is no LPRINT command. The programmer has to select the printer channel and all output will subsequently go in that direction.

```
SELECT PRINT 1
SELECT LIST 1
```

are two commands which open the output channel to the printer. The first if followed by any print command rattles the old printer. The second allows the program to be listed as I have here. Once the output is selected, it will stay selected until such time as the next Select command is encountered.

```
1000 SELECT PRINT 0
```

for instance returns normal output to the screen. So, to list to the screen again is what? If you said "LIST", the printer will still activate. Line 1000 above gives the hint.

There are no reserved words, like in STBASIC. You can have a line like

```
100 RUN = LIST% + SELECT%
```

The software is free ware I believe, for the authors wish more people to really get into it and write programs. The Manual is well worth \$50 if not \$100. It is well presented, easy to read, humourous and almost complete. I still have not determined how to drive a modem with it. I have been playing with it for a month only.

Where do you get it?

It is not available in the software exchange yet. That has to be cleared with the importer. Any enquiries should be to Tony McGrath via ACE NSW address PO box 1514 GPO Sydney.

The manual is the costly element, and I assure you this one fact, you NEED the manual if you are contemplating any serious programming I believe it sells for \$50.

The following listings are from the 82 track 10 sector/track disk (its own special format). I have pulled off three bench marks and one graphics program. The 800XL also was primed in Turbo basic, using the following program as a comparison to listing 1

```
atari 8 bit turbo basic
100 TIME$="#000000"
110 FOR I=1 TO 1000
120 FOR J=1 TO 1000
130 NEXT J:NEXT I
140 PRINT TIME$
```

With SELECT PRINT 1, DBASIC gives a total run time of 17.64 seconds' TURBO BASIC on the other hand barrelled through this empty for loop structure in 12 minutes 35 seconds uncompiled. The same program in STBASIC took 15 minutes.

Comparisons:-

```
JOB      : STBASIC   : DBASIC
LOAD ITSELF : 23 SECONDS: 9 SECONDS
PRINT FRE(0) : 742592   : 917376
EMPTY LOOPS : 15 MINUTES: 17 SECONDS
```

This review was using the monochrome 1040 ST. Later I will look at the colour version.

BOTTOM LINE: It does what I want, quickly and disables GEM. DBASIC is well presented and easy to learn. Out of 10, 9.1 for the manual and 9.5 for the software. It is value for money.

ST BOOK REVIEW

THE CONCISE ATARI ST 68000 PROGRAMMER'S REFERENCE GUIDE

GLENTOP Publishers Ltd
Author Katherine Peel
Foreword by Jack Tramiel

There is a terrible expression used in the various industries, when a book turns out to become the be all and end all, eh, the complete reference guide. It is said to be the "BIBLE".

Well, I guess this one is just that for the ST user seriously programming at any level. It is written in "understandable English" and with common sense. Most other books just do not compare. Most source books and other documentation cannot cover the whys and wherefores. This book does. It is a source of detailed technical material and a quick reference guide of the first order. It is a significant work.

Each chapter starts with an overview that is the bottom line. From that point the chapters get progressively more technical in a way that makes sense. One does not need to be an electrical engineer or computer scientist with three or more PhDs to read it and comprehend. This is a reference manual and almost everything you wanted to know about the ST but were scared to ask.

It is ring bound, and about 400 pages. I have not seen it in the shops here. My copy came from the UK so I cannot quote prices. If you want one, see your book dealer with the following information. If you know an importer, put the heavy word on them; if you are an importer, I'll even buy another copy.

The ISBN
and bar code numbers are:-
ISBN 1-85181-017-X
bar/c 9781851810178

Glentop Publishers Ltd
Standfast House
Bath Place
High Street Barnet
Hertz EN5 5XE

Out of 10, can I say an eleven? NO, ok then, well it tops my previous point score. A must have, and a good Christmas present for your ST.

PREFAIRE

SUPERTYPE

```

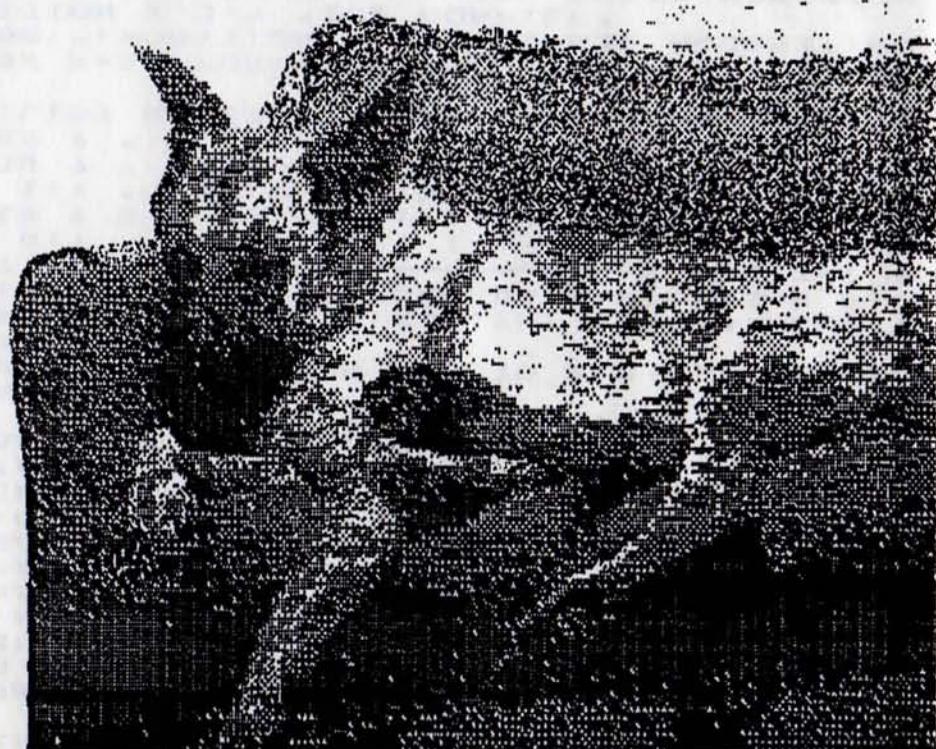
AL 32681 REM **** SUPERTYPE ****
DA 32682 REM *BY SIMON FERRETT*
BT 32683 REM ****
LC 32684 GOTO 32669
BK 32685 ? "5": POSITION 14,1: ? "SUPERTYPE"
AL :SETCOLOR 2,7,8:SETCOLOR 4,7,8:POSITION 11,2: ? "by Simon Ferrett"
XW 32686 POKE 559,34:POSITION 2,15:MEM=INT(FRE(8)/1824): ? "MEMORY=";MEM;"k","AUTO LINE NUM ";
SN 32687 POSITION 1,17: ? "Commands: \Data
^Search _Call #Erase @Exit &DIR |Save !Enter AUTO NAUTO"
ED 32688 IF AUT=1 THEN POSITION 31,15: ? "
EN "
EG 32689 IF AUT=8 THEN POSITION 31,15: ? "
OFF"
TS 32618 POSITION 2,16:PRINT "TYPO CODE=";CODE$,"LAST LINE No. =";OLINE:CODE$="--"
AR 32611 POSITION 2,19:LIST OLINE
UB 32612 POSITION 2,5: ? "Type in program
line or command code."
MF 32613 POSITION 1,7: ? "F": :IF F=2 THEN
POSITION 2,6:LIST LINE:POSITION 2,6: ?
"--"
NV 32614 IF AUT AND NOT F THEN ? LINE;" "
NK 32615 F=8
BK 32616 INPUT #2,LINE$:IF LINE$="" THEN
POSITION 3,6:LINE=OLINE:LIST LINE:F=1:
GOTO 32612
NO 32617 POSITION 1,7: ? " "
TN 32618 IF LEN(LINE$)>4 THEN IF LINE$(1,4)="AUTO" THEN AUT=1:LINE=VAL(LINE$(5)) : ? "STEP "; :INPUT #2:STEP:GOTO 32685
CM 32619 IF LINE$(1,1)="-" THEN POSITION
3,7:LINE=VAL(LINE$(2)):F=2:GOTO 32685
GP 32620 IF LINE$(1,1)="|" THEN LIST LINE
$(2),1,32599:SOUND 1,8,8,8:GOTO 32685
WZ 32621 ON  +2* +3* GOTO 32675,32683,32648
SI 32622 IF LINE$(1,1)="\\" THEN GOSUB 326
46

```

```

TE 32623 IF LINE$(1,1) = "@" THEN ? "5":END
FH 32624 IF LINE$(1,1) = "!" THEN ? "5":POKE 842,13:POKE 559,8: ? : ? "POKE 842,12:
G 32685":POSITION 2,8:ENTER LINE$(2)
OS 32625 IF LINE$="NAUTO" THEN AUT=8:GOTO
32685
DX 32626 IF NOT AUT THEN LINE=VAL(LINE$)
EU 32627 POSITION 2,5: ? , , , :POSITION 2,
11: ? "CONT":POSITION 2,5:POKE 842,13:S
TOP
KE 32628 POKE 842,12: ? "5":POSITION 2,7:L
IST LINE:POSITION 2,8:INPUT #1;LINE$=
32629 IF LINE$="" THEN 32685
SU 32630 IF ASC(LINE$(1,1)) < 49 OR ASC(LIN
E$(1,1)) > 57 THEN 32685
YM 32631 LINE=VAL(LINE$):OLINE=LINE
EU 32632 IF LINE$="" THEN GOTO 32685
EG 32633 ANS=USR(ADR(B$),ADR(LINE$),LEN(L
INE$)):ANS=PEEK(1789)+256*PEEK(1790)+6
5536*PEEK(1791):OLINE=LINE
LU 32634 CODE=INT(ANS/676):CODE=ANS-(CODE
*676)
RT 32635 HCODE=INT(CODE/26):LCODE=CODE-(H
CODE*26)+65+128
ZG 32636 HCODE=HCODE+65+128
YY 32637 CODE$(1,1)=CHR$(HCODE):CODE$(2,2)
=CHR$(LCODE)
YA 32638 IF AUT THEN LINE=LINE+STEP
GF 32639 GOTO 32685
YD 32640 ? "5": ? "Searching .":TI=8:LI$=" "
ZG 32641 LINE=LINE+1:POSITION 2,4:LIST LI
NE:POSITION 2,5:INPUT #1;LI$:TI=TI+1
KE 32642 IF TI=188 THEN ? "PRESS A TO AB
ORT OR RETURN TO KEEP SEARCHING.":IN
PUT #2;LI$:IF LI$="A" THEN 32669
RW 32643 IF TI=188 THEN 32648
EN 32644 IF LI$="" THEN GOTO 32641
SJ 32645 LINE$=LI$:F=2:GOTO 32685
BF 32646 POSITION 2,7: ? , , , :POSITION 2,
6: ? , , , :POSITION 2,6
ZF 32647 IF AUT=1 THEN 32649
WK 32648 PRINT "WHAT LINE NUMBER "; :INPUT
#2;LINE
YY 32649 POSITION 2,6: ? , , ,
GP 32650 LINE$="":IT=8
EZ 32651 LINE$(1,LEN(STR$(LINE)))=STR$(LI
NE):LE=LEN(LINE$)+1
LI 32652 LINE$(LE,LE+5)=" DATA ":LE=LEN(L
INE$)

```



PRINT PICTURE

```

DE 18 DIM D$(19),BUF$(268),CR$(1),CH$(256
$),L$(288),F$(1088),A(1,9),C(9,7),B(7)
WG 28 CR$=CHR$(155):F$="E*♦■T":R=2888
LT 38 ? "Y":CLOSE #1:OPEN #1,4,$,"K":CLO
SE #4:OPEN #4,12,$,"E":GOTO 1818
UH 48 FOR I=1 TO LEN(BUF$):X=ASC(BUF$(I,I))
  :X=(X*8)+1:CH$(X,(X+7));NEXT I
GM 58 FOR I=8 TO 9:X=ASC(D$(I+1,I+1))
XN 68 C(I,$)=INT(X/128):J=3:Q=C(I,$):GOSU
B 158:X=X-C(I,$)*128
FH 78 C(I,1)=INT(X/64):J=5:Q=C(I,1):GOSUB
  158:X=X-C(I,1)*64
WF 88 C(I,2)=INT(X/32):J=7:Q=C(I,2):GOSUB
  158:X=X-C(I,2)*32
HT 98 C(I,3)=INT(X/16):J=9:Q=C(I,3):GOSUB
  158:X=X-C(I,3)*16
RY 108 C(I,4)=INT(X/8):J=11:Q=C(I,4):GOSU
B 158:X=X-C(I,4)*8
VC 118 C(I,5)=INT(X/4):J=13:Q=C(I,5):GOSU
B 158:X=X-C(I,5)*4
UY 128 C(I,6)=INT(X/2):J=15:Q=C(I,6):GOSU
B 158:X=X-C(I,6)*2
EK 138 C(I,7)=INT(X):J=17:Q=C(I,7):GOSUB
  158
MP 148 NEXT I:RETURN
FZ 158 ON Q GOTO 178
GE 168 POSITION I*2+3,J:?:":RETURN
ZU 178 POSITION I*2+3,J:?:":RETURN
XS 188 POKE 764,255:?"Y"
ZH 198 TRAP 218:CLOSE #2:OPEN #2,7,$,"D:$
  .*"
DJ 208 INPUT #2,D$:? D$:GOTO 288
LM 218 CLOSE #2
NK 228 ?:? "LISTED SOURCE FILE NAME"::I
  NPUT L$
DK 238 IF (L$="")+(LEN(L$)>15) THEN 418
AM 248 ? CR$:CR$;"COMPRESSING CODE"
GL 258 RESTORE :CH$="":FOR I=8 TO 255:REA
D D$:CH$(LEN(CH$)+1)=D$:NEXT I
EK 268 IF LEN(CH$)<>256$ THEN ? "Y":CR$:C
R$:;"MDATA ERROR":GOTO 418
NK 278 TRAP 288:LPRINT :GOTO 298
MG 288 ?:? ?:? ?:? "NO PRINTER"-----<----<
  ----->"NO PRINTER":GOTO 418
RL 298 TRAP 388:CLOSE #2:OPEN #2,4,$,L$:G
OTO 318
EP 388 CLOSE #2?:? "FILE ERROR #":PEF
  (195);"FILE":GOTO 418

```

```

HR 318 TRAP 358:INPUT #2,BUF$
BL 328 IF BUF$="" THEN LPRINT :?:GOTO 31
  8
ED 338 ? BUF$:GOSUB 368:F$(6)=""":FOR I=1
  TO LEN(BUF$):X=ASC(BUF$(I,I))
EP 335 X=(X*18)+1:F$(LEN(F$)+1)=CH$(X,X+9
  ):NEXT I:LPRINT F$
MV 348 GOTO 318
NE 358 CLOSE #2:GOTO 1818
YE 368 CH=LEN(BUF$)*18:C1=INT((CH)/256):C
H=CH-(C1*256):F$(4,4)=CHR$(CH):F$(5,5)
  =CHR$(C1)
EN 378 RETURN
CY 388 POKE 559,34:POKE 764,255:?"Y":?:?
  ? "WHAT LETTER TO EDIT"::GET #1,D:?:C
HR$(D)
DC 398 R=D+2888:FOR I=8 TO 9:A($,I)=(2*I)
  +3:NEXT I
RW 408 FOR I=8 TO 9:A(1,I)=(2*I)+3:NEXT I
MB 418 Y=128:?"Y":POKE 82,$:POSITION $,1
  :?"-----":FOR J=1 TO 8:?"-----":"
  428 ? J:?:FOR I=1 TO 11:?"":NEXT I
  :?"<":Y=Y/2:NEXT J:POKE 764,255
IP 438 ? "-----"
OS 448 ? " 1 2 3 4 5 6 7 8 9 $":? "
  ;:LIST R:RESTORE R:Q=1:READ D$:GOSUB 5
  8
RC 458 X=27:POSITION 22,$:?" PIN# -COMMA
  NDS-":POSITION X,2:?"[RET] ACCEPT":PO
  SITION X,3:?"[C] COMPILE"
DF 468 POSITION X,4:?"[Q] QUIT":POSITION
  X,5:?"[S] SAVE":POSITION X,6:?"[L]
  LOAD"
GE 478 POSITION X,7:?"[E] ERASE":POSITION
  X,8:?"[I] INVERSE":POSITION X,9:?"[M]
  MIRROR"
DP 488 POSITION X,10:?"[R] RIGHT":POSITION
  X,11:?"[L] LEFT":POSITION X,12:?"[U]
  UP"
EG 498 POSITION X,13:?"[D] DOWN":POSITION
  X,14:?"[I] INVERT":POSITION X,15:?"[C]
  COPY"
GU 508 POSITION X,16:?"[R] REORT"
WG 518 X=$:Y=$
DU 528 S=STICK($):YO=Y:XO=X:ON (PEEK(764)
  <>255) GOTO 648:ON NOT STRIG($) GOTO 9
  88:ON S=15 GOTO 528
HV 538 POKE 98,A(1,YO):POKE 92,XO
XP 548 ON (S=14)+2*(S=13)+3*(S=7)+4*(S=11)
  ) GOTO 568,578,588,598
DP 558 GOTO 528
ED 568 Y=Y+(Y>8)*(-1):GOTO 688:REM UP
FN 578 Y=Y+(Y<7):GOTO 688:REM DOWN

```

XV 588 X=X+(X<9):GOTO 608:REM RIGHT
 ZP 598 X=X+(X>8)*(-1):REM LEFT
 ZQ 608 POKE 77,B:POKE 84,A(1,YO):POKE 85,A(B,XO):ON NOT C(XO,YO) GOTO 618:?:?"":GOTO 628
 ZP 618 ?:?"":
 ZE 628 POKE 84,A(1,Y):POKE 85,A(B,X):?:?"":
 CT 638 FOR I=1 TO 48:NEXT I:GOTO 528
 KK 648 K=PEEK(764):ON (K=63)+2*(K=42)+3*(K=5)+4*(K=13)+5*(K=12) GOTO 978,718,728,798,688
 VU 658 ON (K=6)+2*(K=7)+3*(K=37)+4*(K=14)+5*(K=15) GOTO 868,898,748,918,938
 SZ 668 ON (K=27)+2*(K=62)+3*(K=8)+4*(K=63)+5*(K=47)+6*(K=18) GOTO 958,768,828,388,1888,188
 NL 678 GOTO 418
 CM 688 POSITION B,21:INPUT L\$:?:?"":BUF\$="":BUF\$(1,1)="2":BUF\$(2)=L\$:POSITION B,3
 LG 698 FOR I=1 TO LEN(BUF\$):?:?"":BUF\$(I,I);:NEXT I:?:?:?"":POKE 842,12:G.3 88":POSITION B,1:POKE 842,13:STOP
 TN 708 STOP
 PW 718 D\$="*****":GOSUB 58:POKE 764,255:POSITION 18,21:?:D\$:GOTO 528
 ET 728 POKE 764,255:POSITION 1,28:?"COPY TO WHICH CHARACTER":;GET #1,D:?"":CHR\$(D):POSITION B,21:?:2888+D:GOTO 528
 FF 738 POSITION 25,28:?"":GOT O 728
 WW 748 POKE 764,12:POSITION 18,21:INPUT #4,D\$:FOR I=1 TO 18:L\$(I,I)=D\$(11-I,11-I):NEXT I
 RY 758 GOTO 888
 JI 768 TRAP 48888
 WI 778 POKE 764,255:?"":CR\$:CR\$:CR\$;"SAVE FILE NAME (D:XXXX)":CR\$;"NO EXTENDER >":INPUT L\$
 KC 788 L\$(LEN(L\$)+1)="CHR":LIST L\$,1999,2568:TRAP 48888:GOTO 418
 CX 798 FOR X=B TO 7:FOR I=B TO 9:C(I,X)=NOT C(I,X):J=3+2*X:Q=C(I,X):GOSUB 158:NEXT I:NEXT X
 VE 808 POKE 764,255:FOR X=B TO 9
 VP 818 POSITION 18+X,21:XA=B:FOR JQ=B TO 7:XA=XA+(C(X,JQ)*2^(7-JQ)):NEXT JQ:?"":CHR\$(XA):NEXT X:X=B:GOTO 528
 CS 828 TRAP 658:POKE 764,255:?"":CR\$:CR\$;"WHAT LOAD FILE NAME (D:XXX)":CR\$;"NO EXTENDER":INPUT L\$
 WM 838 L\$(LEN(L\$)+1)="CHR":CLOSE #2:OPEN #2,4,B,L\$:CLOSE #2
 GN 848 TRAP 48888:?"":POKE 842,13:?:?"":POSITION B,1:ENTER L\$
 NM 858 GOTO 418
 GE 868 POKE 764,12:POSITION 18,21:INPUT #4,L\$
 LB 878 L\$(11)=L\$(1,2):L\$(1)=L\$(2,11):L\$(11)=""
 LB POSITION 11,21:?:?"":POSITION 18,21:FOR I=1 TO 18:?:L\$(I,I);:NEXT I:D\$=L\$:GOSUB 58:GOTO 528
 CK 898 POKE 764,12:POSITION 18,21:INPUT #4,L\$
 JN 908 L\$(LEN(L\$)+1)=L\$:L\$(1,18)=L\$(18,28):L\$(11)="":GOTO 888
 BZ 918 FOR I=B TO 9:K=C(I,B):FOR X=B TO 6:C(I,X)=C(I,X+1):J=3+2*X:Q=C(I,X):GOSUB 158:NEXT X
 UX 928 C(I,7)=K:J=17:Q=K:X=7:GOSUB 158:NEXT I:GOTO 888
 FG 938 FOR I=B TO 9:K=C(I,7):FOR X=7 TO 1 STEP -1:C(I,X)=C(I,X-1):J=3+2*X:Q=C(I,X-1):GOSUB 158:NEXT X
 WZ 948 C(I,B)=K:J=3:Q=K:X=B:GOSUB 158:NEXT I:GOTO 888
 EW 958 FOR I=B TO 9:FOR X=B TO 7:B(X)=C(I,X):NEXT X:CH=B:FOR X=B TO 7:C(I,X)=B(7-X):J=3+2*X:Q=C(I,X)
 XJ 968 GOSUB 158:CH=CH+((Q=1)*2^(7-X)):NEXT X:POSITION 18+I,21:?"":CHR\$(CH):NEXT I:POKE 764,255:GOTO 528
 GN 978 POKE 764,255:GOTO 388:REM KEYS
 YT 988 POKE 77,B:C(X,Y)=NOT C(X,Y)
 QN 998 POSITION 18+X,21:XA=B:FOR JQ=B TO 7:XA=XA+(C(X,JQ)*2^(7-JQ)):NEXT JQ:?"":CHR\$(XA):GOTO 528
 BN 1888 END
 WF 1818 ? :"":POSITION 5,5:?"LARRY'S CHARACTER EDITOR":?:?"":AND PRINTER D RIVER"
 FA 1828 ? :?"PRESS C TO PROGRAM LISTER":?"ANY KEY TO EDITOR":?:?"":INPUT D\$
 QI 1838 ON (D\$="C") GOTO 188:GOTO 388
 XI 2888 DATA *****?*****
 XB 2881 DATA *****?*****
 HJ 2882 DATA *****?*****
 TS 2883 DATA *****?*****
 RF 2884 DATA *****?*****
 KH 2885 DATA *****?*****
 QZ 2886 DATA *****?*****
 TV 2887 DATA *****?*****
 HF 2888 DATA *****?*****

GG	2859	DATA	♥♥♥♥♥♥. . .	BY	2862	DATA	♥♥♥♥F 16+♥♥	XF	2115	DATA	♥♥♥-***\$♥♥
KP	2818	DATA	♥♥M?>?> \ T	PT	2863	DATA	♥♥♥♦@T@G♦♥	EB	2116	DATA	♥♥♥♥ " I♥
KZ	2811	DATA	♥♥♥♥♥♥PPPPP♥	GU	2864	DATA	♥♥8D-@JE = T	DJ	2117	DATA	♥♥♥↑ I I I-♥
TL	2812	DATA	♥PPPPP♥♥♥♥	YA	2865	DATA	♥ N KXXXXX I	NB	2118	DATA	♥♥♥8I H 8♥
MN	2813	DATA	♥@@@@@@@@@@@	VE	2866	DATA	♥KKK-@ 1♥	KX	2119	DATA	♥♥↑ H 4H I↑
FX	2814	DATA	♥. . . .	NO	2867	DATA	♥8 F 111ED♦	IG	2120	DATA	♥♥"♦@♦"♦
UF	2815	DATA	♥. . . .	YG	2868	DATA	♥KKK-FK 18	FC	2121	DATA	♥♥♥ H 11-♥
ET	2816	DATA	♥. . . .	MU	2869	DATA	♥KKK-@ F	SG	2122	DATA	♥♥" &* : *♥
FA	2817	DATA	♥♥♥♥♥→→→→	DF	2870	DATA	♥KKK-@8K@♥	EG	2123	DATA	♥♥-8z@z8-
SV	2818	DATA	♥. . . .	EN	2871	DATA	♥8 F 111n A	GK	2124	DATA	♥♥♥♥♥♥
IK	2819	DATA	♥. . . .	BZ	2872	DATA	♥KKK KKK	FL	2125	DATA	♥P@J@→. ♥
DW	2820	DATA	♥8 KKKK 18	ER	2873	DATA	♥KKK KKK 18	EM	2126	DATA	♥+8 K♥♥♥
UR	2821	DATA	♥. . . .	NN	2874	DATA	♥KKK KKK	JG	2127	DATA	♥♥♥♥♥♥ 18+
AH	2822	DATA	♥K3K♥♥♥♥	GH	2875	DATA	♥KKK-@8 1E	TN	2128	DATA	NON-1@J NO
AN	2823	DATA	♥. . . .	KP	2876	DATA	♥KKK 1111/♥	UC	2129	DATA	111111111111
QE	2824	DATA	♥. . . .	OL	2877	DATA	♥ K 8-8 K 1	IR	2130	DATA	111111111111
ZE	2825	DATA	♥. . . .	LN	2878	DATA	♥ K K 8-8 K K	KG	2131	DATA	111111111111
PS	2826	DATA	♥. . . .	TZ	2879	DATA	♥8 F 111E 8	ZL	2132	DATA	111111111111
HK	2827	DATA	♥. . . .	SA	2880	DATA	♥KKK-@ F 1	GR	2133	DATA	111111111111
SM	2828	DATA	♥. . . .	MG	2881	DATA	♥8 F 111D ;	CH	2134	DATA	111111111111
DK	2829	DATA	♥. . . .	GS	2882	DATA	♥KKK-@ F 1	XT	2135	DATA	111111111111
ED	2830	DATA	♥+8T+♦+♦+♦	DM	2883	DATA	♥ K K K K K K	XW	2136	DATA	111111111111
XZ	2831	DATA	♥+♦+♦+♦+T8♦	ZG	2884	DATA	♥KKK KKK K @	LG	2137	DATA	111111111111
PF	2832	DATA	♥. . . .	UG	2885	DATA	♥KKK 111 KKK	TM	2138	DATA	111111111111
CG	2833	DATA	♥. . . .	NA	2886	DATA	♥KPx" /" KPx	GK	2139	DATA	111111111111
UX	2834	DATA	♥. . . .	XY	2887	DATA	♥KKK-@ KKK	WV	2140	DATA	111111111111
GM	2835	DATA	♥\$ \$ \$ \$ \$ \$ \$	FI	2888	DATA	♥F 168 1E	EB	2141	DATA	111111111111
DD	2836	DATA	♥. . . .	KW	2889	DATA	♥K@♦ 2-2♦K@	KZ	2142	DATA	111111111111
KB	2837	DATA	♥A@F" -8 B@	VP	2890	DATA	♥E KKLZNV	WF	2143	DATA	111111111111
ME	2838	DATA	♥. . . .	WU	2891	DATA	♥KKK-@ KKK	ZT	2144	DATA	111111111111
XJ	2839	DATA	♥. . . .	NC	2892	DATA	♥K@♦ 2-2♦K@	AU	2145	DATA	111111111111
YG	2840	DATA	♥. . . .	OF	2893	DATA	♥CCC-@ F	ZH	2146	DATA	111111111111
NG	2841	DATA	♥. . . .	YV	2894	DATA	♥K@♦ @K@♦	KF	2147	DATA	111111111111
NT	2842	DATA	♥. . . .	CH	2895	DATA	111111111111	NU	2148	DATA	111111111111
BE	2843	DATA	♥. . . .	YE	2896	DATA	♥+8 K 18+♦	XP	2149	DATA	111111111111
YL	2844	DATA	♥. . . .	KG	2897	DATA	♥KKK-@ KKK	GF	2150	DATA	111111111111
BY	2845	DATA	♥. . . .	WF	2898	DATA	♥KKK-@ KKK	GH	2151	DATA	111111111111
XC	2846	DATA	♥. . . .	NX	2899	DATA	♥K@♦ 2-2♦K@	AM	2152	DATA	111111111111
KY	2847	DATA	♥. . . .	LG	2900	DATA	♥KKK-@ KKK	SG	2153	DATA	111111111111
RW	2848	DATA	♥. . . .	MG	2901	DATA	♥KKK-@ KKK	GR	2154	DATA	111111111111
FA	2849	DATA	♥. . . .	EW	2902	DATA	♥KKK-@ KKK	KG	2155	DATA	111111111111
SZ	2850	DATA	♥. . . .	JU	2903	DATA	♥KKK-@ KKK	ZW	2156	DATA	111111111111
OJ	2851	DATA	♥. . . .	SI	2904	DATA	♥KKK-@ KKK	FG	2157	DATA	111111111111
ZH	2852	DATA	♥. . . .	GY	2905	DATA	♥KKK-@ KKK	NK	2158	DATA	111111111111
SB	2853	DATA	♥. . . .	BH	2906	DATA	♥KKK-@ KKK	TW	2159	DATA	111111111111
JD	2854	DATA	♥. . . .	NE	2907	DATA	♥KKK-@ KKK	BN	2160	DATA	111111111111
YP	2855	DATA	♥. . . .	KG	2908	DATA	♥KKK-@ KKK	MF	2161	DATA	111111111111
MZ	2856	DATA	♥. . . .	DG	2909	DATA	♥KKK-@ KKK	ZN	2162	DATA	111111111111
BK	2857	DATA	♥. . . .	OF	2910	DATA	♥KKK-@ KKK	LE	2163	DATA	111111111111
CT	2858	DATA	♥. . . .	WZ	2911	DATA	♥KKK-@ KKK	DV	2164	DATA	111111111111
IG	2859	DATA	♥. . . .	ZX	2912	DATA	♥KKK-@ KKK	UG	2165	DATA	111111111111
EC	2860	DATA	♥. . . .	OF	2913	DATA	♥KKK-@ KKK	PK	2166	DATA	111111111111
GU	2861	DATA	♥. . . .	OF	2914	DATA	♥KKK-@ KKK	SD	2167	DATA	111111111111

$$\leftarrow C \approx \pi \approx \pi \approx C$$

COMMITTEE MEMBERS

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NEXT MEETINGS:-

OCTOBER 12TH
NOVEMBER 9TH
DECEMBER 9TH
NONE IN JANUARY

DISKINVY.BAS

```

ND 2 REM # DISK/FILE INVENTORY #
GE 3 REM # by #
IA 4 REM # Merrick NacinoVich #
UM 5 REM ##### #####
EW 28 DIM SORT$(169), BUFFER$(256), DATE$(8)
    , DISK$(7), F$(17), X$(35), W$(1): RN=8: NR
    =RN
KF 38 X$= " . . . . .
    . . . "
ED 48 MAXREC=1858: RECLEN=25: DIM M$(RECLEN
    *MAXREC): OPEN #1,8,8,"P": OPEN #4,4,8,
    "K:"
RI 58 FOR I=1 TO 169: READ A: SORT$(I,I)=CH
    R$(A): NEXT I
GU 68 GOSUB 618: POKE 752,8
MW 78 ? "Y": POKE 718,28: POSITION 13,2: ? "
    DISK INVENTORY": POSITION 2,5: ? "ENTER
    DATE (DD/MM/YY): ";: INPUT DATE$
WT 88 IF LEN(DATE$)>8 THEN ? CHR$(253): GO
    TO 88
GC 98 ? "Y": GOTO 218
GG 188 TRAP 218: OPEN #3,6,8,"D:.*.*"
RL 118 INPUT #3,F$: W$=" " : GOSUB 158: RN=RN
    +1
CO 128 IF RN>MAXREC THEN RN=MAXREC: GOSUB
    688: GOTO 288
EB 138 IF LEN(F$)<17 THEN F$(LEN(F$)+1)=" "
    : GOTO 138
FA 148 M$(LEN(M$)+1)=DISK$: M$(LEN(M$)+1)=
    F$: M$(LEN(M$)+1)=W$: GOTO 118
JZ 158 IF F$(3,13)="DOS" SYS" THEN POP
    ; GOTO 118
ME 168 IF F$(3,13)="DUP" SYS" THEN POP
    ; GOTO 118
TT 178 IF F$(3,13)="MEM" SAV" THEN POP
    ; GOTO 118
VY 188 IF F$(3,13)="DIR" " THEN POP
    ; GOTO 118
SK 198 IF F$(1,1)="*" THEN F$(1,1)=" " : W$=
    "*"
YY 288 RETURN
LM 218 CLOSE #3: ? "Y": POSITION 18,5: ? "In
    sert disk and enter": POSITION 13,7: ? " "
    disk reference.": TRAP 48888
XU 228 POSITION 14,9: ? "(max 7 char)": POS
    ITION 19,12: ? "OR,": POSITION 5,22: ? "R
    ecords entered: "; RN; "(max "; MAXREC; ")"

```

```

JZ 238 POSITION 4,15: ? "Type SORT to sort
    /print records.": ? : ? : INPUT DISK$: IF
    LEN(DISK$)>? THEN ? CHR$(253): GOTO 238
DF 248 IF DISK$="SORT" THEN 278
JU 258 IF LEN(DISK$)<? THEN DISK$(LEN(DIS
    K$)+1)=" " : GOTO 258
LT 268 GOTO 188
SF 278 IF LEN(M$)<>RECLEN*RN THEN ? CHR$(253): ? "Y": ? : ? : ? "PROBLEM !!!": ST
    OP
IS 288 POKE 752,1: ? "Y": POSITION 8,6: ? "S
    ort by": POSITION 18,9: ? "DISK, or
    ": POSITION 18,18: ? "RECORD"
WE 298 POSITION 12,12: ? "o": POSITION 18
    ,14: ? "END": GET #4,K
MR 308 IF K<49 OR K>51 THEN ? CHR$(253): G
    OTO 288
RV 318 IF K=49 THEN K=8: GOTO 348
IW 328 IF K=58 THEN K=7: GOTO 348
NY 338 END
RG 348 L=RECLEN: A=ADR(M$): B=A+RN*RECLEN: C
    =B-RECLEN: D=ADR(BUFFER$): E=K: F=23
MF 358 ADDR=41+ADR(SORT$): HBYTE=INT(ADDR/
    256): LBYTE=ADDR-256*HBYTE: POKE 232,LBY
    TE: POKE 233,HBYTE
HJ 368 SORT=USR(ADR(SORT$),L,A,B,C,D,E,F)
DQ 378 ? #1; "
    DISK/FILE INVE
NTORY"
SG 388 ? #1; "
    ; DATE$: ?
    #1; "
RD 398 ? #1; "
    (* = Locked file)
    Disk# Notes"
TE 488 LINES=4
WX 418 FOR ZZ=8 TO (RN-1)
KJ 428 G=ZZ*25: COUNT=ZZ+1
XX 438 IF COUNT>999 THEN ? #1; "
    ; CO
    UNT: "
    ; M$(G+25,G+25): M$(G+8,G+24):
    " "
    ; M$(G+1,G+7): X$: GOTO 478
ME 448 IF COUNT>99 THEN ? #1; "
    ; COU
    NT: "
    ; M$(G+25,G+25): M$(G+8,G+24):
    " "
    ; M$(G+1,G+7): X$: GOTO 478
EN 458 IF COUNT>9 THEN ? #1; "
    ; COUN
    T: "
    ; M$(G+25,G+25): M$(G+8,G+24):
    " "
    ; M$(G+1,G+7): X$: GOTO 478
CS 468 IF COUNT<=9 THEN ? #1; "
    ; COU
    NT: "
    ; M$(G+25,G+25): M$(G+8,G+24):
    " "
    ; M$(G+1,G+7): X$: GOTO 478
SF 478 LINES=LINES+1: IF LINES=68 THEN ? #
    1: CHR$(12): LINES=8
ZI 488 NEXT ZZ
KG 498 ? #1; CHR$(12): GOTO 288

```

SH 588 DATA 184,184,184,133,248,184,133,2
42,133,244,184,133,241,133,243,184,133
,246,184,133,245,184,133,248,184,133
PI 518 DATA 247,184,133,258,184,133,249,1
84,184,133,238,184,184,133,231
HJ 528 DATA 165,242,133,252,165,241,133,2
51
VM 538 DATA 24,165,241,181,248,133,241,14
4,2,238,242
BT 548 DATA 165,242,197,246,288,6,165,241
,197,245,248,29,164,238,177,241
EC 558 DATA 289,251,248,13,176,223,165,24
2,133,252,165,241,133,251,24,144,212,2
88,196,231,248,287,24,144,229
LK 568 DATA 168,8,177,251,145,249,288,196
,248,288,247,168,8,177,243,145,251,288
,196,248,288,247,168,8,177,249
LC 578 DATA 145,243,288,196,248,288,247
DU 588 DATA 24,165,243,181,248,133,243,14
4,2,238,244
EC 598 DATA 165,244,197,248,288,7,165,243
,197,247,288,1,96,165,244,133,242,165,
243,133,241,188,232,8
MR 688 ? "5":POSITION 2,7:?"SORRY - MEMO
RY IS FULL !":FOR T=1 TO 1888:NEXT T:R
ETURN
VX 618 ? "5":POKE 718,64:POKE 752,1:POSIT
ION 9,8:?"~~DESK/FILE/INVENTORY~~":POSITI
ON 17,11:?"b"
RW 628 POSITION 9,14:?"MERRICK NACINOVIC
H":FOR T=1 TO 1888:NEXT T:RETURN



ATARI COMPUTER ENTHUSIASTS [N.S.W.]

G.P.O. BOX 4514, SYDNEY. 2001. N.S.W. AUSTRALIA.

ABOUT THE ATARI COMPUTER ENTHUSIASTS (N.S.W.)

Atari Computer Enthusiasts (NSW) is an independent, non-profit computer users group for owners and users of Atari Computers. ACE(NSW) is loosely affiliated with Atari Computer Enthusiasts throughout the USA, England, Holland, Germany and Ireland. While we are recognised by the Atari Corporation throughout the world, as the official Atari Users' Group in NSW, we have no connection with them.

Our aims include the promotion of the various Atari Home Computer Systems; the education of both beginners and advanced users in programming techniques; exchanging public domain software, hints, tips, ideas, and explaining the Special features of the Atari Computers.

The group is active in many areas and encourages the members to obtain the maximum benefit by participating in all club projects. Of special interest to members are the following:-

- * * A bi-monthly journal called "Inside Info". This contains the news, reviews, articles, program listings, technical information, hint, tips, help and general articles of interest.
- * * A large reference library of Atari Books and technical information.
- * * A software exchange programme. Here public domain programs are collected from the user groups across the world, (8 and 16 bit) and issued for sale within the group to members.
- * * There are Special Interest Groups (SIGS) which look at the various aspects of the computer. Some run workshops.
- * * A Public Remote Access Computer System (a bulletin board) for the free exchange of information between computers using the Australian phone network.
- * * Member discounts at various business houses.
- * * Cut prices on media such as blank disks.

Official Meetings are held monthly. They are informal and usually include talks on programming technique, demonstrations of new software and keep the members up to date with the latest news and information from Atari internationally. These meetings are in two parts, with a 15 to 30 minute break for general discussions (getting to meet you) and business.

Everyone is Welcome. Meetings are held at 6:15 PM on the SECOND MONDAY of the Month (NOTE: There is no meeting in January).

The MEETING PLACE : Y.W.C.A. CNR WENTWORTH AVE & LIVERPOOL ST
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FEES. Membership is \$20 per year. To join, Fill in the membership application form (found at the centre of this edition) and send it with a cheque or money order made out to Atari Computer Enthusiasts (N.S.W.) and mailed to the above address. All Mail and enquiries should be addressed to 'The Hon. Secretary'. Alternately, you may pay at any official meeting.

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